

# **Archeology of Old Worlds**

Jan Lavrinovski

All rights reserved

## Contents

|                                                        |    |
|--------------------------------------------------------|----|
| Coins.....                                             | 1  |
| Skeletons: Stories Etched in Bone.....                 | 14 |
| Jewelry: Wealth, Craft, and Identity.....              | 23 |
| Weapons: Forged for Battle, Buried in Peace.....       | 32 |
| Writing Tablets: Traces of Ancient Minds.....          | 41 |
| Inscriptions: Words Carved in Stone.....               | 51 |
| Figurines: Small Forms, Big Meaning.....               | 60 |
| Building Foundations: Traces of Lost Architecture..... | 69 |

# Coins

## Russian Coins

### 1300 and earlier – Novgorod Wire Money and the Earliest Dengas from Vladimir-Suzdal

In the frozen soil of Northern Russia, hidden beneath layers of birch and centuries of silence, tiny silver coins once passed hand to hand among merchants, princes, and warriors. These were the earliest Russian coins—small, thin, often irregular in shape, and stamped with mysterious designs that spoke volumes about power, trade, and cultural identity. Among them, the Novgorod wire money and the dengas of Vladimir-Suzdal stand as some of the most elusive and evocative artifacts of medieval Russian numismatics.

The city of Novgorod, a thriving hub of commerce and governance, played a pivotal role in the emergence of Russian coinage. By the 10th and 11th centuries, Novgorod had established itself as a key player in long-distance trade, particularly through the Varangian-Byzantine route. However, it wasn't until the late 13th and early 14th centuries that localized coinage began to emerge in a recognizable, standardized form. These early coins were not cast or struck in the traditional Western sense but created using a distinctive technique: hammered silver wire.

Novgorod wire money—sometimes called "wire kopeks"—was fashioned by cutting thin silver wire into segments, hammering each piece flat, and then impressing it with dies bearing the marks of the ruling prince or mint authority. Because of their method of production, these coins were small and light, typically weighing just under a gram. The earliest examples feature depictions of mounted warriors, Cyrillic inscriptions, and occasionally religious symbols like crosses or saints, reflecting the interweaving of martial, political, and spiritual power.

The true rarity of these coins lies not only in their age and fragility but in their context. They often surface in hoards, bundled with foreign currency, ornaments, and hacksilver, buried hastily or as offerings. In 2005, a hoard discovered near the Volkhov River contained over two hundred wire coins dating from the 13th to the early 14th century. Among them were several previously unknown variants, bearing the names of local rulers and experimental designs that never became standard. Each coin, despite its minuscule size, became a passport of authority—proof that a particular ruler claimed control over silver and trade in a fractious political landscape.

Meanwhile, to the southeast, the principality of Vladimir-Suzdal developed its own coinage traditions. The dengas—silver coins that would lend their name to the modern Russian word for money, "dengi"—emerged in this region under the patronage of ambitious princes looking to solidify their autonomy and prestige. The Vladimir-Suzdal dengas predate standardized national coinage by centuries and are characterized by highly stylized images. Some feature royal figures with outstretched arms, possibly invoking Byzantine iconography, while others bear crude renderings of animals, archers, or saints.

One such *denga*, discovered near Suzdal in a 19th-century excavation, bears a double-headed creature flanked by dotted borders and an inscription now lost to wear. Though the precise meaning is debated, scholars believe it reflects the blend of pagan symbolism and emerging Christian identity in the region. Unlike Novgorod, which had maritime connections, Vladimir-Suzdal's coinage was more localized, tied to internal tribute systems and the assertion of regional dominance.

Together, the Novgorod wire money and the *dengas* of Vladimir-Suzdal reveal a dynamic and transitional period in Russian history. These coins weren't merely instruments of commerce; they were declarations of independence, emblems of shifting alliances, and tokens of identity. Each one, barely larger than a fingernail, carried the ambitions of a prince and the echoes of a people emerging from the shadow of the Khazar and Mongol empires, inching toward the shape of a nation. Their survival into modern times is nothing short of miraculous, and their study offers one of the most tangible connections to the origins of Russian statehood.

By the year 1300, the landscape of Russian coinage was still in its formative stage. Unlike the well-established monetary systems of Western Europe or the Islamic caliphates, the Rus principalities were experimenting with form, material, and usage. Coinage did exist, but it had yet to become centralized or uniform across the fragmented regions. The concept of money circulated more as a mixture of locally minted coins, foreign imports, and weighed silver—often in the form of hacksilver, jewelry, and ingots.

The predominant material for coinage in Russia during this period was silver. Gold coins were almost nonexistent in local production. Gold, while known and traded, was more often encountered through foreign coins, particularly from Byzantium or Islamic lands, and it remained a luxury medium reserved for high-status transactions, religious treasures, or diplomatic gifts. The overwhelming majority of Russian coins, especially those from Novgorod and Vladimir-Suzdal, were made of low-grade silver, frequently debased due to shortages or the inconsistent quality of imported bullion.

The standard units in circulation included the **denga**, the foundational coin that gave rise to Russia's monetary vocabulary. In this early phase, a *denga* was a small silver coin weighing between 0.5 and 1 gram. Its value varied by region and issuer. Larger denominations, when needed, were not minted but calculated through aggregations of smaller silver coins or silver weighed out in *grivnas*—large bars or lumps of silver used in accounting and taxation.

A *grivna*, both a weight and a notional unit, was an essential part of the economic system. In the 13th and early 14th centuries, a *grivna* in the Novgorod tradition weighed approximately 200 grams, though versions varied by city-state. Since coins were often cut from wire and irregular in shape, larger sums were tallied by weight rather than count, making scales an indispensable tool in markets and treasury chambers alike.

Some of the rarest examples of coinage from this period include early wire coins bearing partial inscriptions or hybrid motifs. For instance, coins that combined Byzantine iconography with Old Church Slavonic script, or those that hinted at Islamic influence through design symmetry, are considered unique and extremely valuable today. One such example, discovered in a hoard near Pskov, shows a standing warrior on one side and a cryptic, partially legible inscription that appears to blend Cyrillic and Arabic-like curves—possibly a local engraver imitating foreign coins he had seen but not fully understood.

Foreign coins also circulated widely and were often accepted at face value or melted down. Dirhams from the Islamic world were especially common due to trade and tribute routes that stretched across the steppes. The Khazar legacy and Mongol domination under the Golden Horde introduced coins from Central Asia, some bearing Persian or Mongolian inscriptions, which coexisted with local coinage for decades.

Thus, Russian currency around the year 1300 was a complex, decentralized mosaic of native innovation and foreign influence. It reflected a land still emerging from tribal confederations into political states, caught between the magnetic pull of Europe, Byzantium, and the East. Coinage was not yet a matter of imperial policy—it was a local expression of authority and a survival tool in an unpredictable, often war-torn economy. Each coin struck in this era was a small experiment in autonomy, a flash of silver in the hands of a people slowly shaping their identity through metal, weight, and symbol.

### **1400: Coins of Vasily I and Vasily II**

As the 14th century gave way to the 15th, the political and cultural landscape of northeastern Rus was shifting. The Mongol yoke, which had loomed over the Russian principalities for nearly two centuries, was beginning to weaken, though its imprint on every facet of life remained unmistakable—including the coinage. The coins minted during the reigns of Vasily I (1389–1425) and his son Vasily II (1425–1462) reveal a fascinating hybridity: the assertion of Muscovite independence was taking shape, yet the aesthetic and structural influence of the Golden Horde still clung to these small silver artifacts.

Under Vasily I, the Grand Principality of Moscow continued to pay tribute to the Mongol khans, even as its power grew. His coinage reflects this duality. The silver *denga*, still the dominant form, bore inscriptions in Old Church Slavonic but retained the visual syntax of earlier Mongol issues. Many coins of this era depict mounted horsemen—an image directly descended from the silver coins of the Golden Horde, particularly those issued by khans like Tokhtamysh or Uzbek Khan. The rider, often shown with a bow or saber, was a potent image: both an echo of Mongol authority and a symbolic assertion of local martial strength.

Interestingly, some of Vasily I's coins are so closely modeled after Tatar designs that numismatists once mistook them for foreign issues. The adaptation was likely strategic. As Muscovy's princes sought to gain political advantage within the fragmented Golden Horde, imitating Mongol coinage may have helped maintain economic fluidity across tribute routes and border regions. It was, in a sense, a monetary diplomacy—asserting local leadership while appearing respectful of the khan's dominion.

The coins of Vasily II, known as Vasily the Blind, mark a subtle evolution. His reign was marred by civil war and rivalry, especially with his cousin Dmitry Shemyaka, and yet coinage remained a consistent expression of his contested sovereignty. The imagery on these coins began to shift more clearly toward Muscovite identity. While the equestrian motif persisted, the inscriptions grew more assertively Slavic, naming the prince more clearly and sometimes invoking divine sanction.

One rare coin minted under Vasily II depicts a mounted warrior with a raised saber on one side and the inscription “Vasily Kniaz Velikii” on the other—“Vasily, Grand Prince.” The

iconography is still martial, but the language signals a growing confidence. These coins circulated not only in Moscow but also in surrounding territories like Tver and Ryazan, where allegiance was uncertain and influence contested.

The material of these coins remained silver, though debasement was common. Political instability, coupled with military campaigns, often strained the supply of precious metals. As a result, some issues from this era are so thin they resemble foil, while others are so crude that identifying marks are barely visible. And yet, despite their imperfections, these coins were part of a quiet revolution—the solidification of Muscovy as a monetary and political nucleus.

Mongol influence lingered longest in the technique. The hammered wire coin continued to dominate, and the very shape of these coins—oblong, uneven, often bearing only partial impressions—reflects a continuity with earlier practices. It would take another century before Russian coinage adopted the round, Western-style coin blanks. Until then, the wire coin was both a relic of Mongol heritage and a vehicle for local assertion.

These coins of Vasily I and II are rarely found in isolation. Most appear in mixed hoards, often alongside coins from the Golden Horde, Lithuania, and early Ottoman territories, suggesting a broad circulation network and the complex web of alliances, rivalries, and trade that defined 15th-century Eastern Europe. In these humble silver pieces, we glimpse a world in flux—one in which empires were fading, identities were forming, and the future of Russia was being minted one wire coin at a time.

## **1500 – Ivan the Terrible's Monetary Reforms and the Rise of Orthodox Symbolism**

The 16th century marked a dramatic turning point in the history of Russian coinage. With the rise of Ivan IV—better known as Ivan the Terrible—the Grand Principality of Moscow transformed into the Tsardom of Russia, and along with this political evolution came sweeping monetary reforms. Coins were no longer just practical tools of trade or regional tokens of authority; they became instruments of centralized power, religious ideology, and national identity.

Ivan IV officially assumed the title of Tsar in 1547, but his involvement in monetary reform began earlier during the regency period. In the early decades of the 1500s, the Russian monetary system was plagued by inconsistency. Each major principality—Moscow, Novgorod, Tver, Ryazan—still minted its own variations of the silver wire kopek, leading to confusion and inefficiency in trade. Ivan's goal was to centralize minting, standardize currency, and align the symbols on coins with his broader ideological project: the establishment of a divinely sanctioned, Orthodox Christian autocracy.

One of the most iconic shifts during his reign was the increasing use of explicitly Christian imagery and inscriptions on coins. The mounted warrior, inherited from the Mongol and early Muscovite traditions, was retained but reinterpreted. Instead of a generic horseman, Ivan's coinage introduced the **"St. George the Dragon Slayer"** motif. St. George, a Christian martyr and military saint, became a potent symbol of Orthodox faith and divine protection. His depiction—mounted on a horse, spear in hand, vanquishing a dragon—was more than

just religious iconography. It was a metaphor for the Tsar's vision of himself: the god-anointed defender of Russia against external heresies and internal chaos.

Coins from this period also bore the Tsar's full titles in Cyrillic, often engraved along the narrow band of the flattened silver wire coin. An example from the 1550s reads: "ЦПБ ИБАИ ВСЕЯ РУСИ" (Tsar Ivan of All Russia). This was the first time such titles had been formally stamped into coinage, and it marked a significant rhetorical shift. The message was clear—Moscow was no longer just a principality among many, but the core of a unified and sacred empire.

Ivan also reformed the structure of the monetary system itself. He formalized the **kopek** as the base unit, equal to 1/100 of a ruble, and established a strict scale between kopecks, dengas (1/2 kopeck), and polushkas (1/4 kopeck). For the first time, the ruble became a conceptual unit of account—though not minted as a coin until centuries later. By consolidating this hierarchy, Ivan enabled more efficient taxation, record-keeping, and control over commerce.

Despite these reforms, the physical coins remained modest in appearance. They were still made by cutting silver wire into pieces, hammering them flat, and striking them with dies. Due to their small surface area, inscriptions were often abbreviated, and images could appear crude or off-center. Yet their significance was immense. These humble silver slivers now carried the full weight of Orthodox imperial ideology, fusing faith and state in metal.

Rare and exceptional coins from Ivan's era include trial strikes that never saw wide circulation. One such coin, discovered in a hoard near Yaroslavl, featured both St. George and the double-headed eagle—an emblem borrowed from Byzantium and reinterpreted as the symbol of Russian autocracy. Though the design was likely too intricate for mass production using wire coinage methods, it reveals an early ambition to create a distinctly Russian visual language of sovereignty.

Another rare find, unearthed near Kolomna, bore an image of Christ Pantocrator—an Eastern Orthodox depiction of Christ as ruler of the universe—unprecedented in Russian coinage. Scholars believe it may have been minted for ceremonial use or limited distribution among high-ranking clergy or boyars. Its presence underscores the extent to which Ivan's state projected its power not only through warfare and law but through sacred images encoded in silver.

Ivan IV's coinage, then, was more than monetary reform—it was a declaration of empire. His coins transmitted a message to every village, market, and merchant: the Tsar ruled not merely by sword or bloodline, but by divine right, and his authority was as weighty and immutable as the silver stamped with holy symbols and sovereign titles. These coins marked the beginning of modern Russian currency, both in structure and symbolism, and they remain today among the most sought-after treasures for historians and collectors alike.

## **1600 – Coins from the Time of Troubles: False Dmitrys and the Chaos of Crisis Minting**

The early 17th century was one of the most volatile periods in Russian history, a time when thrones were seized and lost, borders were redrawn in blood, and silver—once the language of stable power—became a medium of uncertainty. Known as the Time of Troubles, this era

from roughly 1598 to 1613 was marked by famine, foreign invasions, civil war, and dynastic collapse. Nowhere is this turbulence more vividly reflected than in the coinage minted during these chaotic years. Coins became not just instruments of economy, but tools of propaganda, instruments of desperation, and artifacts of imposture.

The crisis began with the death of Tsar Feodor I in 1598, the last of Ivan the Terrible's Rurikid line. His passing ushered in a scramble for succession, ultimately leading to the rise of Boris Godunov. Godunov's rule, initially accepted, quickly became unstable. Amid rumors, omens, and growing popular unrest, a series of pretenders emerged—men claiming to be the murdered son of Ivan the Terrible, Dmitry Ivanovich. The most famous of these was False Dmitry I, a Polish-backed claimant who seized Moscow in 1605 after Godunov's sudden death.

Coins minted under False Dmitry I are among the rarest and most intriguing in Russian numismatics. They reflect an extraordinary moment when a pretender managed to seize real power—long enough to control the mints and commission his own coinage. His silver wire kopecks bear the title “Tsar Dmitry Ivanovich,” and some include the epithet “of all Rus,” marking an audacious attempt to legitimize his reign through currency. These coins were stylistically similar to those of previous tsars but often show slight variations in script and die work, suggesting the hurried retooling of official minting operations.

In 1606, False Dmitry I was overthrown and killed, his body mutilated and cremated. But he was not the last. False Dmitry II, known as the “Bruder Tsar,” emerged soon after, leading another wave of upheaval and minting his own coinage during his control of parts of Southern Russia. The coins attributed to him are far scarcer and often more crudely struck. Scholars debate the authenticity of some, as they may have been unofficial or struck under local authorities acting in his name.

These crisis coins were not simply for everyday transactions—they were assertions of sovereignty in a country fragmented by warlords and foreign armies. Mints operated under duress or shifted control as power changed hands. Coin production moved between Moscow, Tver, Pskov, and even frontier towns like Chernigov. Some emergency issues are so thin and misshapen they seem more like tokens than legal tender.

Even more remarkable are the coins from the brief Polish occupation of Moscow (1610–1612), when Polish prince Władysław IV Vasa was proposed as Tsar by pro-Polish boyars. Coins were minted in his name, though surviving examples are few and often poorly preserved. These issues reflect the moment when the idea of a Catholic monarch ruling Orthodox Russia was briefly considered a political solution. The fact that these coins exist at all—minted by foreigners in the heart of Russia—is a striking symbol of how deep the national crisis had become.

Meanwhile, regional powers attempted to stabilize commerce. Cities like Novgorod and Pskov issued provisional coinage, often using outdated dies or overstriking older coins. These stopgap measures kept local economies from total collapse and illustrate how currency was not merely a tool of central authority but a matter of communal survival.

The Time of Troubles ended in 1613 with the election of Mikhail Romanov, inaugurating a new dynasty and a slow return to order. His early coinage, while still wire-based, bears a distinct change in tone—less bombastic, more reserved, and focused on re-establishing



legitimacy. The chaos of the past fifteen years had left the economy shattered and trust in coinage tenuous. But through these misshapen, hastily minted slivers of silver, we can still trace the desperation, ambition, and upheaval of a nation unmoored.

Today, coins from the Time of Troubles are prized not only for their rarity but for what they represent: a frozen record of imposture, hope, betrayal, and resilience. They are relics of a Russia suspended between ruin and rebirth, with each fragile coin a voice echoing from a fractured, uncertain past.

## **1700 – Peter the Great’s Monetary Modernization**

As the 18th century dawned, Russia stood on the edge of profound transformation. No longer content to remain a semi-isolated Eurasian principality, Tsar Peter I—later known as Peter the Great—set out to reforge Russia into a modern European empire. His ambitions spanned every sphere: military, naval, administrative, cultural, and economic. Among his most lasting and visible reforms was a sweeping overhaul of the Russian monetary system. Coins, long hammered from silver wire in a tradition unchanged for centuries, were to be replaced with machine-struck, Western-style coinage—uniform, round, and inscribed with symbols of a new imperial identity.

Peter understood that control over currency meant control over commerce, taxation, and perception. He had seen firsthand the efficiency of Western European minting practices during his Grand Embassy tour of 1697–1698, when he traveled incognito through Holland, England, and the Holy Roman Empire. Observing the mints in these nations, he was struck by their ability to produce high volumes of standardized, legible coinage with machines that rolled and struck blanks with precision. This inspired him not just to reform Russian minting, but to rebuild it from the ground up.

By 1700, Peter had already begun the phasing out of the archaic silver wire kopek. The old style—oblong, thin, and imprecise—was incompatible with his vision of a rationalized, imperial economy. In its place came milled coins, round and often bearing inscriptions in Latin as well as Cyrillic, clearly modeled after the coinages of Prussia, Austria, and England. The new coins bore his likeness, the Roman-style bust of a strong, clean-shaven ruler wearing a laurel or cuirass, replacing centuries of symbolic or anonymous iconography. The inscriptions now read: “Петръ Алексѣвичъ Б.М.Царь и Великий Князь Всея Руси” (Peter Alekseyevich, by the Grace of God, Tsar and Grand Prince of All Russia), a formula lifted in tone and structure from Western royal styles.

These early issues were not without resistance. For a population used to centuries of simple, nearly abstract wire coins, the new round pieces—with foreign inscriptions, a human likeness, and exact measurements—seemed alien and even threatening. Some rumors spread that Peter’s portrait bore the features of the Antichrist or that the coins were cursed. In remote regions, older coin types continued to circulate well into the 1710s, long after the reform was technically in place. But the state, through decrees, penalties, and sheer force of production, gradually established the new standard.

The earliest coins of Peter’s reform era are known among collectors and numismatists as **transitional issues**—coins struck between 1699 and roughly 1705 that show experimental

dies, inconsistent sizes, and limited mintage. These pieces are extremely rare today, often existing in only a handful of surviving examples. One such coin, a 1701 silver ruble minted in Moscow, displays both Latin and Cyrillic script, with a half-length bust of Peter in armor. Its irregular flan and slightly off-center strike reflect a minting process still in transition, a blend of old techniques and imported machinery not yet fully mastered.

Peter's reforms introduced not just a new aesthetic but a coherent monetary hierarchy. The ruble was officially established as a silver coin, worth 100 kopecks, and was minted alongside gold coins such as the chervonets, modeled after Dutch ducats, and smaller copper denominations for everyday use. This tri-metallic system—copper for small change, silver for standard transactions, gold for wealth and foreign trade—was intended to match European standards and facilitate international commerce.

One of the most curious and rarest of Peter's coins is the 1725 platinum test strike, a piece not circulated but produced as an experiment. While platinum would not become a monetary metal in Russia until the 19th century, this early attempt shows how far ahead Peter's mint officials were thinking. Though only a few of these prototype coins were made, and fewer still survive, their existence is a testament to the innovation Peter's reign brought to Russian numismatics.

By the time of Peter's death in 1725, the transformation was complete. Russia's monetary system had been yanked out of medieval tradition and inserted, almost violently, into the modern age. His coins, orderly and imperial, mirrored the new Russian state: ambitious, centralized, and marching in lockstep with the great powers of Europe. Yet the rare transitional coins—bearing the awkward blend of old and new—remain as artifacts of the tension and ingenuity that defined his reforms. They are not just currency but witnesses to a moment when Russia, by hammer and die, declared itself reborn.

### **Viking silver hoards: Cuerdale Hoard (England), Galloway Hoard (Scotland), rich in Islamic and Carolingian coins**

While the Russian lands were shaping their identity through fragile wire coins and religious iconography, across the North Sea another story of silver was being written—one that bound distant corners of the world together in the strongboxes and burial pits of Viking raiders, traders, and settlers. The Viking Age, stretching roughly from the late 8th to the 11th centuries, was marked not only by brutal raids and legendary longships, but by an astonishing accumulation and redistribution of wealth. Nowhere is this more dramatically preserved than in the great silver hoards of England and Scotland—specifically, the Cuerdale Hoard and the Galloway Hoard—which remain among the most significant archaeological finds in the British Isles.

Discovered in 1840 on the banks of the River Ribble in Lancashire, the Cuerdale Hoard is the largest Viking silver hoard ever found in England. Workers repairing the riverbank uncovered a buried lead chest filled with more than 8,600 items: coins, ingots, ornaments, and hacksilver. The hoard, dated to around 905 CE, is believed to have belonged to a Norse community exiled from Dublin, possibly in preparation for a campaign to retake the city. Its contents were astonishing not just in volume but in variety, offering a panoramic view of the Viking world.

Coins from across Europe filled the chest. There were hundreds of Anglo-Saxon pennies, including issues of Alfred the Great, and a wide selection of Carolingian deniers from the Frankish Empire, revealing deep trade ties and the spoils of war. But most surprising were the Islamic dirhams—silver coins minted in what is now Uzbekistan, Iran, and Iraq, some bearing Kufic inscriptions from the Abbasid Caliphate. These coins had traveled thousands of miles, likely moving through the hands of Baltic traders and into Scandinavia before finding their way to the British Isles. Their presence in the hoard proves the reach of the Viking trade network, extending from Baghdad to York.

Unlike minted currency today, much of the silver in the Cuerdale Hoard was not kept in pristine coin form. There were bars, chopped fragments of jewelry, and twisted arm rings—all forms of hacksilver, a flexible currency measured by weight. This was a mobile, fluid system of wealth suited to Viking mobility. Silver was not just money; it was adornment, offering, and resource. Items could be worn, gifted, melted, or traded, and their value was intrinsic, based on purity and weight, rather than the authority of a mint.

If Cuerdale is a record of military exile and economic ambition, the Galloway Hoard, discovered in 2014 in southwest Scotland, offers a more mysterious and richly textured picture. Buried around the late 9th or early 10th century, the hoard includes over a hundred objects—many made of silver and gold—contained within a lidded vessel. It was deliberately hidden and layered in an elaborate manner, suggesting ritual or ceremonial significance beyond mere concealment.

The Galloway Hoard's contents defy simple categorization. Alongside Viking arm rings and ingots were items of Anglo-Saxon, Irish, and Carolingian origin—among them, a decorated Christian cross, silk textiles from Central Asia, and rare enamelwork previously unknown in Viking contexts. As with Cuerdale, Islamic coins were also present, hinting again at the eastward connections that funneled wealth into the northern seas. The diversity of materials speaks to a cosmopolitanism that often eludes modern stereotypes of the Vikings. These were not just raiders—they were middlemen in a global economy.

What makes the Galloway Hoard particularly valuable to historians is the state of preservation and the complex way in which it was deposited. The upper layers contained worn silver bullion, but deeper within were items that had clearly been wrapped, tied, and protected—personal, perhaps sacred objects. It may have belonged to a high-status individual or been a communal treasury hidden during a time of threat. Some scholars propose it was the treasury of a Christian cleric or bishop forced to flee during Norse incursions, and others suggest it was the ritualized wealth of a Viking chieftain who blended pagan and Christian elements in his personal identity.

Together, the Cuerdale and Galloway hoards illuminate the Viking world not as a peripheral, barbaric fringe but as an integrated player in a vast web of trade and diplomacy. Silver flowed like blood through this world—across steppes, rivers, and seas—linking distant caliphates with snowy fjords and English abbeys. The coins, chopped arm rings, and alien silk fragments now resting in museum cases are echoes of that network. They tell of a world built not just on conquest, but on connection.

## **Roman aurei: Imperial portraits, gold content, and discoveries like the Hoxne Hoard**

In the golden glint of a Roman aureus, emperors live forever. More than mere currency, these coins were mobile monuments, miniature sculptures of imperial might designed to circulate not just wealth, but ideology. The **aureus**, Rome's premier gold coin for centuries, served as both a medium of high-value transactions and a propaganda tool carried in the hands of generals, merchants, and citizens alike. Struck from high-purity gold and bearing the meticulously engraved visages of emperors, the aureus offers modern historians an unparalleled visual record of Roman authority—and some of the most breathtaking coin hoards ever unearthed.

First introduced under Julius Caesar around 46 BCE and standardized by Augustus, the aureus was originally valued at 25 silver denarii. It measured roughly 7–8 grams of nearly pure gold, often struck with astounding detail. The portrait on the obverse typically depicted the reigning emperor, a tradition that would become nearly sacred in Roman coinage. These portraits were not casual likenesses; they were stylized but idealized, carefully crafted to project strength, youth, wisdom, or divine favor, depending on the emperor's image goals. The reverse sides featured military victories, deities, or scenes symbolizing prosperity, justice, and imperial grandeur.

One of the most iconic aurei is that of Augustus, showing the first emperor in a serene, youthful profile, paired with a reverse image of the *clipeus virtutis*—his "shield of virtue"—symbolizing his moral excellence as a ruler. Later issues under Trajan and Hadrian expanded this tradition, often celebrating building projects, conquests in Dacia or Britannia, or the elevation of the emperor to divine status. These coins weren't just made to be spent—they were declarations in gold, circulated from Roman Gaul to Syria, shaping public opinion in places where no sculpted bust or equestrian statue would ever stand.

The durability and purity of the aureus ensured that many would survive buried beneath Roman villas, in ruined temples, or scattered across former battlefields. But among the most dazzling discoveries of aurei comes from the Hoxne Hoard, unearthed in Suffolk, England, in 1992. This hoard, accidentally found by a farmer with a metal detector, yielded over 15,000 Roman coins—most silver, but with nearly 580 gold pieces, primarily solidi (a later evolution of the aureus) from the late Roman period, particularly the 4th and early 5th centuries.

Though the Hoxne aurei are post-classical, they represent the last glorious gleam of Roman Britain. Coins bearing the portraits of Honorius, Theodosius I, and Arcadius were discovered, all beautifully preserved, with legends still crisp and imperial titles legible. The hoard also contained lavish gold jewelry and finely wrought household objects, suggesting that it was the emergency treasure of a wealthy Roman-British noble, hidden during times of political instability—perhaps around the withdrawal of Roman troops from Britain in the early 400s CE.

Other notable aureus finds include the Brescello Hoard in Italy, which contained pristine coins from Nero and Vespasian, and the Boscoreale Hoard near Pompeii, buried beneath ash in 79 CE and sealed in time. The Boscoreale coins, blackened but intact, give a rare sense of the real-world use of these coins—stored in homes, traded in markets, or brought to temples as offerings. Some aurei even bear graffiti or banker's marks, signs that they were tested, authenticated, or perhaps used in accounting.

The aureus eventually gave way to the **solidus** under Constantine the Great in the 4th century, a thinner but equally potent gold coin that would become the backbone of Byzantine currency for centuries. Yet the earlier aurei remain the quintessential symbol of Roman monetary power—dense in value, imperial in spirit, and stunning in artistry.

To hold one today is to touch the ambitions of emperors. Gold does not corrode, and neither did the Roman desire to project authority in every corner of the empire. In each aureus, the empire whispered: "Rome is eternal." And though Rome fell, its coins endure, outliving the palaces and forums that once gave them meaning.

### **Florentine florins: Artistry and stability as financial tools in medieval Europe**

In the bustling workshops and banking houses of 13th-century Florence, a coin was born that would come to define not only an economy, but an era. The Florentine florin, introduced in 1252, was a gold coin of uncommon beauty and unmatched influence. In a medieval world often plagued by currency devaluation, unpredictable minting practices, and fragmented economic systems, the florin became a beacon of financial stability and artistic refinement. It was not simply a coin—it was a brand, a reputation cast in gold, and it reshaped the way commerce flowed across Europe and beyond.

The florin was revolutionary in both form and function. Weighing approximately 3.5 grams and made of nearly pure gold (around 24 carats), it was the first widely accepted gold coin in Western Europe since the fall of the Roman Empire. At a time when most regions relied on silver currency or barter, Florence's decision to issue a high-value gold coin was both bold and visionary. Its introduction corresponded with the rise of powerful Florentine banking families—like the Bardi and the Peruzzi—and with the city's growing influence in Mediterranean trade.

What set the florin apart was its remarkable consistency. While other mints were prone to debasing their coins, reducing weight, or issuing confusing denominations, Florence held the florin's weight and purity steady for centuries. Merchants from Bruges to Constantinople trusted the florin implicitly, and its acceptance across borders made it the default coin for large-scale trade, contracts, and diplomacy. Even rival cities, such as Venice and Genoa, eventually introduced their own gold coins—ducats and genovini—modeled directly after the florin.

Visually, the florin was a work of art. The obverse bore the fleur-de-lis, the stylized lily that symbolized Florence itself, regal and symmetrical. The reverse featured an image of St. John the Baptist, the city's patron saint, often shown in flowing robes or in a meditative pose. These designs were more than decorative; they projected the coin's origin, its sacred endorsement, and the civic pride of Florence. For the Florentines, the florin was not just a monetary tool—it was a signature.

The florin's reach was astonishing. It appeared in trade contracts from Flanders to the Levant, was accepted by kings and sultans, and even made its way into the treasuries of the papacy. The Vatican often requested tribute and donations in florins, a testament to their reliability and worth. Documents from the 14th and 15th centuries regularly record payments and dowries specified in florins—even in regions that minted no gold of their own.

The coin also played a key role in the rise of financial instruments. Bills of exchange, early forms of banking drafts, were often settled in florins, and many international accounts used the florin as a base unit of measure. Its stability allowed the complex machinery of medieval finance to operate across linguistic, legal, and cultural boundaries. A merchant in London could write a contract payable in florins in Bruges, and a banker in Florence could underwrite a shipment to Cyprus knowing that the coin's value would be honored.

Surviving florins today are not just collectors' items; they are testaments to the enduring power of trust and precision. Some bear subtle variations—mint master marks, updated portraits of St. John, or changes in the fleur-de-lis design—that reflect the coin's long lifespan and the city's evolving aesthetics. Others, found in hoards across Europe, sometimes appear in caches buried during times of war or plague, a sign that when crisis struck, people reached for the one coin they believed would outlast the storm.

Perhaps most famously, the florin helped bankroll the art and architecture of the Italian Renaissance. The wealth it symbolized flowed into churches, palaces, and paintings. It paid the salaries of architects like Brunelleschi and painters like Giotto. It was, quite literally, the coin that funded humanism.

In a medieval world of shifting alliances, unreliable mints, and fragmented economies, the Florentine florin stood alone—pure, trusted, and beautiful. It carried not just gold, but confidence and identity. To carry a florin was to belong to a larger world, one ruled not by brute power alone, but by the quiet force of economic precision. And that, in its own way, was a revolution.

### **Islamic gold dinars: Kufic inscriptions, Umayyad and Abbasid dynasties, and their appearance in Viking hoards**

Among the most graceful and culturally charged coins in the history of global currency, the Islamic gold dinar stands apart. More than a monetary tool, it was a portable proclamation of faith, power, and legitimacy, its surface inscribed not with portraits but with words—precise, sacred, and deliberate. From the deserts of the Umayyad caliphate to the icy burial grounds of Viking hoards in Northern Europe, the dinar's shimmering path offers a story of economic reach, spiritual identity, and unexpected connections.

The gold dinar was first minted in 696–697 CE under Caliph Abd al-Malik of the Umayyad dynasty, during a time of intense consolidation and administrative reform. His reformation of Islamic coinage represented a sharp departure from the imagery of Byzantine and Sasanian influences that earlier Muslim territories had inherited. Where prior coins bore emperors or fire altars, the new dinars bore only words—verses from the Qur'an, declarations of faith, and references to the reigning caliph. This was not merely aesthetic. It was ideological. The absence of human or animal imagery was a direct expression of Islamic aniconism, reinforcing the supremacy of the divine word in both religion and governance.

The Kufic script used on these coins is striking in its geometry and severity. Bold, angular, and linear, it wraps around the coin in concentric circles, filled with symmetry and intention. A typical dinar from the Umayyad period features the Shahada—"There is no god but God, and Muhammad is the messenger of God"—on one side, and on the reverse, a declaration of the caliph's authority, often including the mint location and the Islamic year. These

inscriptions turned each coin into a declaration of both religious orthodoxy and political dominance.

With the rise of the Abbasid Caliphate in 750 CE, the dinar retained its form and function but adopted new names and slogans. The Abbasid coins are often even more refined, with elegantly executed Kufic lines and an expansion of mints across a vast empire that stretched from North Africa to Persia. Coins minted in places like Baghdad, Cairo, Tunis, and Samarkand all bore witness to the Abbasids' far-reaching administrative control. Despite regional differences in language and culture, the gold dinar unified the caliphate's economy with a shared religious and political vocabulary.

What surprises many is the presence of these Islamic coins far beyond the borders of the Islamic world—particularly in Viking hoards found across Scandinavia and the British Isles. In burial mounds and silver caches from Sweden, Denmark, and even Scotland, Islamic dirhams (silver coins) and occasional gold dinars appear, marked with Kufic inscriptions and dating from the 8th to the 10th centuries. These coins did not arrive through conquest but through trade, carried along the great rivers of Eastern Europe via the Varangian trade routes—networks connecting the Baltic to Byzantium and the Islamic world through the Dnieper and Volga rivers.

Some hoards in Sweden contain hundreds of Islamic coins, often clipped or stamped with runes by Viking traders. The presence of gold dinars is rarer than silver dirhams, but when they do appear, they mark moments of high-value exchange or elite accumulation. One dinar, found in a hoard near Gotland, bore the name of the Abbasid Caliph al-Mahdi (reigned 775–785 CE) and was likely part of a diplomatic gift or high-level commercial transaction. Another, discovered in a mound burial in Russia's Upper Volga region, may have been a personal talisman, valued for its gold and its exotic script, even if its meaning was not fully understood by its northern owner.

These coins were prized for their metal content first, but they were also objects of fascination. The clean, abstract design of the dinar stood in contrast to the image-heavy coinage of Europe. Some Viking warriors, unfamiliar with Arabic, viewed the inscriptions as magical or sacred; others, particularly those involved in long-distance trade, learned to recognize specific names or symbols as signs of legitimacy and value.

Islamic gold dinars remind us that medieval trade was not confined to caravans or Mediterranean ports. It moved across snow-covered forests and river portages, from caliphal mints to Viking hands. These coins, inscribed with verses from a desert prophet and found buried with Norse chieftains, represent a fusion of worlds rarely imagined together. They speak to the complexity of a past too often divided into simplistic cultural spheres.

The dinar, in its elegance and reach, exemplifies the global medieval world: literate, interconnected, and rich with contradiction. It is gold that glows with theology, history, and the quiet resonance of distant hands passing it from one empire to another.

## Skeletons: Stories Etched in Bone

### Russian finds

#### **Pazyryk burials in Siberia: Tattooed remains, elite horsemen, and preserved corpses in permafrost**

In the windswept highlands of the Altai Mountains, where Russia brushes the borders of Mongolia and Kazakhstan, the ancient dead lie encased in ice and silence. Beneath burial mounds known as *kurgans*, a culture flourished in the Iron Age that left behind not stone monuments nor vast cities, but something even more intimate: their bodies, nearly untouched by time. These are the Pazyryk burials, and within them were found some of the most astonishingly preserved human remains in all of archaeology—elite horsemen, warriors, and nobles whose tattooed skin, clothing, and belongings endured the centuries beneath the permafrost.

Discovered in the 1920s and again more extensively in the 1940s and 1990s, the Pazyryk tombs belonged to a nomadic people of the 5th to 3rd centuries BCE. Their world was one of open steppe, warfare on horseback, and artistic refinement that belied their rugged environment. The preservation was accidental, born of the tombs' construction: deep stone chambers, lined with wood and buried under mounds of earth, were flooded with snow and water that froze solid, sealing their contents in icy crypts for over two thousand years.

Among the most haunting and scientifically important discoveries was the so-called "Siberian Ice Maiden", uncovered in 1993 by Russian archaeologist Natalia Polosmak. Found at the Ukok Plateau, she lay on a wooden bier, dressed in fine garments of felt and silk, her head shaved and topped with an elaborate wig and tall headdress. But it was her tattoos, dark blue patterns on her arm and shoulder, that drew the world's attention. Depicting stylized deer, mythical beasts, and curling vines, the tattoos were not mere decoration—they hinted at spiritual significance, perhaps identifying her status as a priestess or shaman. Even in death, her role was preserved in ink and ice.

Equally remarkable were the male burials. One such tomb held a warrior whose preserved skin bore complex tattoos down both arms—fierce animals, contorted in movement, resembling the art found on Scythian metalwork and saddle decorations. The man was buried with a full arsenal: a bow, arrows, an axe, and a dagger. His horse, adorned with a carved wooden mask shaped like a gryphon's head, lay beside him, evidence of the ritual importance of the animal in death as in life. In Pazyryk culture, horses were status symbols, companions in battle and spiritual journey. Often, several horses were buried with a single nobleman, each decorated, harnessed, and arranged as if awaiting the next ride.

The grave goods provide a window into their worldview—intricately carved combs, Chinese silk (evidence of early trade with the East), cannabis seeds for ritual use, and drinking vessels made of wood and horn. The craftsmanship is astonishingly refined for a nomadic people, challenging assumptions about the cultural "simplicity" of mobile societies. Their textiles, particularly, stand out: dyed wool, embroidered fabrics, and felt appliqués preserved so well that the stitching and patterns remain visible today.



What truly sets the Pazyryk skeletons apart from other Iron Age remains is the degree to which they were **culturally whole**. We do not simply find bones—we find lives, expressed through clothing, ink, ritual, and preservation. The Pazyryk people did not fear death; they prepared for it meticulously. Their tombs were not hurried burials but monumental acts of remembrance and transformation, crafted to guide the deceased into another world.

Even today, the discovery site is sacred. Local Altai communities regard the tombs with reverence, and the removal of the Ice Maiden sparked both academic wonder and spiritual unrest. Some shamans claimed her disinterment angered the spirits, linking a series of regional misfortunes—including earthquakes—to her disturbance. Whether one sees this as myth or echo, it reveals the enduring power of these ancient burials: they are not dead stories but living legacies, etched in flesh, bone, and earth.

### **Yaroslavl mass graves from the Mongol invasion: Signs of trauma, siege survival, and DNA studies**

In the heart of Yaroslavl, a city now serene with Orthodox cupolas and quiet streets, the ground beneath the old churches holds a tale far darker and more violent. It is a story not of royal splendor or icy preservation, but of burning, starvation, and slaughter. In 2005, archaeologists excavating near the Church of the Nativity of Christ uncovered a series of **mass graves** dating to the early 13th century—specifically the year 1238, when the Mongol invasion of Rus, led by Batu Khan, swept through with unstoppable ferocity. These graves bear the raw physical evidence of one of the darkest chapters in early Russian history.

The Mongols, having already destroyed Ryazan, Kolomna, and Vladimir, reached Yaroslavl in early February 1238. Historical chronicles speak in broad, terrible strokes—cities set aflame, people massacred, churches desecrated—but the bones unearthed centuries later tell the story with intimate clarity. Over a hundred individuals were buried hastily, some in shallow pits, others layered together with no sign of ritual or order. This was not burial as honor—it was burial as necessity, perhaps by the few survivors who remained after the fires cooled and the screams fell silent.

The skeletons bore graphic evidence of trauma. Skulls split by sword strikes, bones shattered by blunt force, and bodies showing signs of execution-style injuries. Many of the victims were women and children, suggesting that this was not a battlefield but a massacre. In some cases, wounds had begun to heal before death, indicating prolonged suffering—people injured during the siege who died days or weeks later, perhaps from infection, hunger, or continued violence. There were signs of fire damage on some bones, corroborating accounts that many died in burning buildings, unable or unwilling to flee.

One of the most haunting discoveries was the presence of dental enamel hypoplasia in children's skeletons—evidence of malnutrition and stress during early development. This suggests that conditions in Yaroslavl were already difficult before the final assault, likely due to siege warfare tactics employed by the Mongols: surrounding the city, cutting off supplies, and waiting for the defenders to weaken before launching a final, brutal assault. The hunger etched into the teeth was a silent prelude to the slaughter carved into the bones.

Modern DNA studies on the remains have provided new layers of insight. Analysis confirmed the local origins of most victims, their genetics consistent with the broader Volga-Oka population. However, a few individuals showed genetic markers pointing to mixed heritage—possibly from neighboring steppe populations—indicating the diverse makeup of urban centers like Yaroslavl, even in the 13th century. Some studies also revealed traces of pathogens, including the early presence of *Yersinia pestis*, the bacterium responsible for plague, suggesting that microbial threats may have followed closely on the heels of Mongol devastation.

But perhaps the most chilling find was more subtle—a pair of skeletons, one adult woman and a teenage girl, buried together in a shallow trench, arms entwined. Their bones bore no signs of trauma. They may have died from starvation or smoke inhalation. Were they mother and daughter? Refugees huddling in a cellar as the city burned? There is no inscription, no marker, only the position of their bodies and the silence of centuries.

The Yaroslavl mass graves are not unique in the wake of the Mongol invasion, but their scale and preservation make them a rare and visceral window into the personal cost of empire-building. Here, the Mongol conquest is no longer a paragraph in a chronicle—it is a cleaved skull, a charred ribcage, a child's tooth. It is history made brutally, visibly real.

And in uncovering these graves, modern Russia was forced to confront a foundational trauma not often reflected in monuments. There is no triumph here, no heroism, only the vulnerability of the human body and the enduring weight of memory. The bones ask no questions and offer no blame—but they do not let us look away.

### **Shanidar Cave in Iraq: Neanderthal skeletons with signs of compassion and healing**

High in the Zagros Mountains of northern Iraq lies a cave whose silence stretches back tens of thousands of years. Shanidar Cave, tucked into a rocky escarpment above a dry riverbed, became one of the most important archaeological sites of the 20th century—not for what it revealed about civilization, but for what it suggested about its origins. Here, in the dimness of prehistoric time, lay the remains of **Neanderthals**, and with them, evidence not of brutish survival alone, but of care, ritual, and perhaps even compassion.

Excavations at Shanidar Cave began in the late 1950s, led by archaeologist Ralph Solecki. What he and his team uncovered astonished the world: the skeletal remains of ten Neanderthals, dating from approximately 45,000 to 60,000 years ago. These were not scattered or isolated finds; they were deliberate burials, some carefully positioned and surrounded by signs of intentional interment. Among them, one skeleton in particular—**Shanidar 1**—would challenge everything science thought it knew about Neanderthal life and mentality.

Shanidar 1 was an elderly male, estimated to be around 40 to 50 years old at the time of his death—remarkable longevity for his era. But it was his physical condition that stunned researchers. His skeleton bore clear signs of severe injuries and disabilities: a crushed and withered right arm, likely amputated or unusable for decades; a deformed right foot; blindness in one eye; and probable hearing loss. These were not minor afflictions. In a harsh

Ice Age environment where survival depended on strength, agility, and mobility, Shanidar 1 should not have survived long on his own.

Yet he did.

The evidence strongly suggests that Shanidar 1 was cared for by others. He could not have hunted, fled predators, or gathered food alone. His community must have helped him—fed him, protected him, and allowed him to live for years after his injuries. This care implies more than mere group cooperation. It suggests a level of empathy and social bonding once thought exclusive to modern humans. Here was a Neanderthal man, disabled but not discarded, whose very survival was a monument to human compassion in its earliest, most primitive form.

Even more famous, though more controversial, is Shanidar 4, often dubbed the "Flower Burial." Pollen samples found in the soil around his body led to the theory that flowers had been deliberately placed in his grave—an early act of mourning, ceremony, or spiritual belief. Though some scientists later suggested the pollen may have been deposited by burrowing animals, the possibility of intentional floral placement remains alluring, offering a glimpse into symbolic behavior among Neanderthals.

Further excavations at Shanidar in the 2010s brought new surprises. Additional Neanderthal remains were found, including Shanidar Z, a well-preserved adult skull and partial skeleton, buried within inches of the original finds. These new discoveries have reignited debates about Neanderthal burial practices, suggesting that they returned to the same location repeatedly to bury their dead—indicating not just memory, but perhaps sacred space.

Shanidar's Neanderthals are important not only for what they tell us about an extinct human cousin, but for what they reflect back at us. Their skeletons reveal robust bodies adapted for cold, powerful grips, thick bones—and yet, within that strength, a tenderness survives. In the ruined elbow of Shanidar 1 and the curve of flowers around Shanidar 4 lies the suggestion of an inner life: emotional, communal, and enduring.

These are not the Neanderthals of outdated caricature—grunting, dull-witted brutes. They are beings who felt pain, connection, and loss. The bones from Shanidar are etched not just with the marks of time and trauma, but with the first faint echoes of what would become humanity's defining gift: the capacity to care for another.

### **“Red Lady” of El Mirón (Spain): Upper Paleolithic burial with rich ochre use and grave goods**

Beneath the cold limestone of El Mirón Cave in northern Spain, in a dark chamber that had not seen sunlight in over 18,000 years, archaeologists made a discovery that shimmered with symbolic resonance. There, nestled in sediment and silence, was the grave of an Upper Paleolithic woman—a burial so richly treated with red ochre that her remains seemed to glow from within the earth. Though known popularly as the “Red Lady”, her identity, age, and social role remain cloaked in mystery. What is certain is that she was not just buried—she was honored, remembered, and possibly revered.

El Mirón Cave, in the Cantabrian Mountains, had long attracted archaeologists for its continuous record of Ice Age occupation, stretching back tens of thousands of years. But in 2010, a team excavating one of the inner chambers encountered something unexpected: a large limestone slab resting on a human skeleton. As the sediment was carefully removed, it became clear that the body—female, around 35 to 40 years old—had been intentionally buried, her bones dusted in fine red ochre and surrounded by tools, personal ornaments, and fragments of antler and bone.

Red ochre, an iron-rich earth pigment, appears in burials across Paleolithic Europe and is widely interpreted as a symbolic substance. It may have represented blood, life force, purification, or passage into the afterlife. In the case of the Red Lady, the ochre was particularly dense near the skull, suggesting deliberate application to the head or face—perhaps part of a ritual dressing or a final act of adornment by those who buried her. The pigment’s vibrant hue still clings to her remains after millennia, like a memory written in earth.

The grave goods further deepen the mystery. Found around her were finely crafted stone tools, worked flint blades, and pierced animal teeth—possibly once strung as necklaces or sewn into clothing. Some items showed signs of wear, indicating they had been used in life before being placed in the grave. Others appear deliberately broken, possibly as part of a funerary rite. These objects were not just buried with her—they were offered, transitioning from the world of the living to accompany her into another.

Notably, her grave was isolated within the cave, a striking choice given the larger communal use of the site. There is no evidence that El Mirón was regularly used for burial—only this single interment, suggesting that she held special status. Was she a spiritual figure, a matriarch, or someone remembered for wisdom, artistry, or leadership? Without written language, we can only interpret through gesture, material, and care. But the burial’s singular nature implies that she was not forgotten. For generations, her grave was marked by that large slab, perhaps a monument in the darkness, guiding the memories of those who visited or dwelled nearby.

Intriguingly, later human activity in the cave shows signs of deliberate interaction with her burial site. Fragments of the slab were broken off, possibly to take pieces away as talismans or relics. Ochre residues found in surrounding sediments hint that the pigment may have been reapplied or revisited. Even millennia later, her presence seemed to resonate—a focal point in the cave’s long human story.

Recent analyses of the Red Lady’s bones suggest she led a physically demanding life, with well-developed muscle attachments indicating strength and regular activity, perhaps related to tool-making, food gathering, or travel. Yet she was not aged, and her death does not appear to have been violent. It was her burial, not her trauma, that marked her significance. In the depths of El Mirón, amid the flickering light of fire and the cold breath of stone, someone laid her down with care and color, as if to preserve not just a body, but a memory wrapped in ochre and silence.

The Red Lady reminds us that symbolic thought—ritual, memory, grief—was not born with civilization. It lay deep in our past, in the hearts of hunter-gatherers who understood death not as an ending, but as a moment that called for art, for color, and for ceremony. In that crimson

dust and those ancient bones, we find the earliest stirrings of humanity's need to remember—and to mourn.

### **Moche priestesses (Peru): Elaborate burials of elite women with regalia**

In the scorched valleys of northern coastal Peru, long before the rise of the Inca, a culture flourished that built towering adobe pyramids, practiced ritual sacrifice, and left behind some of the most enigmatic burials in the ancient Americas. The Moche civilization, which thrived from roughly 100 to 800 CE, was once believed to be a male-dominated warrior society, ruled by powerful priest-kings. But a series of breathtaking discoveries in the last few decades has rewritten that narrative. Beneath the sands, archaeologists have uncovered the graves of elite Moche women—not mere queens or noblewomen, but priestesses and rulers, buried with regalia so rich and symbolic that they have forever changed our understanding of gender, power, and death in the ancient Andes.

The first of these remarkable finds came in 1991, when archaeologist Santiago Uceda excavated the Huaca Cao Viejo pyramid near El Brujo. There, in a sealed adobe chamber, lay a tattooed woman in her twenties, her skin marked with snakes and spiders, her body wrapped in fine textiles. She was surrounded by weapons, ceremonial clubs, jewelry, and ritual objects—including headdresses of gold and copper, nose rings, and scepters—all typically associated with Moche male elite. But DNA analysis and pelvic structure confirmed her sex: she was female. This was the Lady of Cao, and her burial was not an anomaly—it was a revelation.

The Lady of Cao's tomb was one of authority. She was buried in a platform that overlooked ceremonial plazas, suggesting she may have presided over religious events or public rituals. Her body was wrapped in layers of cotton and fine cloth, laid atop a wooden bier, and enclosed in a burial bundle that weighed over 200 kilograms. Accompanying her were objects crafted from gold, silver, copper, and semiprecious stones, all indicators of elite status—but also of sacred function. This was not a consort buried beside power; she was power.

In the years that followed, other Moche burials reinforced the presence of powerful women in ritual and governance. At the San José de Moro site, archaeologists discovered multiple “Priestess of San José de Moro” tombs—lavish interments of women dating from roughly 600 to 800 CE. These tombs included tall ceramic goblets, sculpted scenes of religious ceremonies, and regalia matching the iconography of Moche murals and ceramics. In those artworks, women dressed identically to the buried priestesses are depicted conducting rites—often holding goblets and flanked by attendants, offering sacrificial blood or performing elite rituals. The archaeology and art form a seamless whole: these were the women who appeared in Moche sacred narratives, now found in the earth with their ceremonial lives intact.

What distinguishes these burials is not only their opulence but their consistency across sites, suggesting an institutionalized female priesthood or rulership. They were not symbolic exceptions but recognized figures of authority within the culture. Some tombs included multiple burials—likely retainers or sacrificial offerings—and elaborate architecture, including platforms, painted walls, and ceremonial chambers, indicating the enduring presence of the dead in the spiritual life of the community.

The objects buried with these women speak to their roles in Moche society. Scepters and goblets symbolized ritual authority, while crescent-shaped headdresses and nose ornaments, crafted from sheet gold and adorned with imagery of sea creatures, owls, or serpents, suggested a cosmological identity. The tattoos found on the Lady of Cao—spiders and snakes—evoke themes of fertility, warfare, and the underworld. The priestesses may have acted as intermediaries between the living and the divine, their roles part oracle, part governor, part embodiment of Moche cosmology.

These burials challenge earlier assumptions that equated power in ancient societies with masculinity. The Moche priestesses were not only present but central to the religious and possibly political structures of their culture. They ruled not from behind a throne, but through ritual, symbolism, and death itself.

Today, their tombs are among the most visited and studied archaeological sites in Peru, and their preserved bodies—especially the Lady of Cao—are national treasures. Yet beyond their ornate jewelry and regalia, these women offer something deeper: a vision of a society where power, spirituality, and identity were not bound by simple binaries, but expressed through complex, symbolic, and richly adorned lives.

### **Tollund Man (Denmark): Iron Age bog body with perfectly preserved facial features**

In a peat bog near the town of Silkeborg in central Denmark, a man sleeps eternally beneath layers of moss, water, and time. His eyes are closed, lips gently pressed together, and brow furrowed as if in faint thought. He could be mistaken for someone in the midst of a nap—until one realizes that he died more than 2,300 years ago. This is the Tollund Man, one of the most remarkably preserved human remains from the Iron Age, whose serene expression and haunting preservation offer a direct and almost unsettling window into the rituals, beliefs, and daily life of prehistoric Europe.

Discovered in 1950 by peat cutters in the Bjældskovdal bog, Tollund Man immediately shocked and mesmerized archaeologists. His facial features were intact, not as bone or outline but in full detail—eyelashes, beard stubble, even the folds of his skin. The anaerobic, acidic conditions of the bog had effectively mummified him, preserving his soft tissues while tanning his skin into a leathery brown. It was as though time had paused at the moment of his death.

He was found curled into a fetal-like position, naked except for a leather cap and a carefully crafted belt. Around his neck was a braided leather noose, tightly drawn and knotted under his chin. This single detail pointed not to a natural death, but to execution or ritual sacrifice. He had been deliberately placed in the bog, gently, with care—his body laid on a bed of peat, legs arranged, eyes closed. There was no sign of resistance, struggle, or trauma beyond the ligature. It was not a crime scene in the modern sense. It was something older and stranger—perhaps sacred.

Tollund Man lived during the early part of the Iron Age, around 375–210 BCE, a time when Denmark's landscape was dotted with tribal settlements, and beliefs were woven into the rhythms of land, weather, and gods. The ritual deposition of bodies in bogs across northern Europe—Germany, the Netherlands, Ireland—suggests a pan-cultural tradition of sacrifice to

nature deities. The bogs were seen not as wastelands but as thresholds, liminal places between worlds, ideal for offerings to spirits or gods of fertility, harvest, or war.

Tollund Man's last meal, revealed through stomach content analysis, offers clues to the ceremony surrounding his death. He had eaten a simple porridge made from barley, flaxseed, and wild grasses—grains that may have held symbolic meaning or represented a sacrificial diet. There were no meat residues, and the meal appeared deliberately prepared, perhaps as part of a rite or fast. The porridge included ergot, a fungus that grows on grain and can cause hallucinations or poisoning—whether intentional or incidental remains a subject of debate.

Further analysis showed that Tollund Man was around 40 years old at the time of his death, well-fed and in good health. His hands were uncalloused, suggesting he may not have done hard manual labor—perhaps indicating higher social status, or a ritual role. The smoothness of his features and the absence of injury (aside from the hanging) point toward a carefully controlled death, not a violent punishment but an orchestrated act, possibly to appease angry gods or ensure agricultural success.

What makes the Tollund Man so powerful is not only his state of preservation but the profound **intimacy** of his presence. In museums, ancient skeletons are often remote, their lives reconstructed through guesswork and fragments. But the Tollund Man looks back. His expression, calm and almost contemplative, blurs the boundary between past and present. It is impossible not to feel that he was someone—known, remembered, chosen.

His discovery also opened the door to new questions about prehistoric European spirituality, violence, and the human relationship with death. Was his sacrifice voluntary? Was he revered? Feared? Was his burial part of a communal ritual known to all, or the secretive act of a priestly class? No written records remain—only the silent testimony of his body, laid in a bog, cradled by earth and water.

The Tollund Man is now displayed at the Silkeborg Museum, where visitors still pause before his case, hushed by the power of that face. More than two millennia after his death, he offers not just data, but **presence**—a man from an age of gods and offerings, preserved as if to be remembered.

## **Plague pits in London and Black Death mortality studies**

Beneath the bustling streets and gleaming glass towers of modern London lies a buried landscape shaped not by war or empire, but by disease. During the mid-14th century, the city was brought to its knees by an invisible enemy—the Black Death, a wave of bubonic plague that swept through Europe with unprecedented speed and horror. In just a few short years, it erased millions of lives, collapsing economies, reshaping social structures, and leaving behind a legacy written in bone. In London, the clearest testimony to this devastation comes not from chronicles or records, but from the plague pits—mass graves silently holding the story of a city in crisis.

The Black Death arrived in England in 1348, likely entering through the port of Melcombe Regis in Dorset before reaching London by the autumn of that year. Within months, the capital was overwhelmed. Contemporary accounts describe carts piled with corpses, clergy

unable to keep pace with burials, and a city drowning in fear and death. The population of London—estimated at around 80,000 before the plague—was reduced by nearly half in less than two years.

As graveyards filled, the authorities turned to mass burial pits, large trenches hastily dug outside the city walls. These were not elegant cemeteries but emergency responses to a scale of mortality no society had experienced before. One of the most famous of these sites is located in Charterhouse Square, near what is now the Barbican district. First discovered in the 1980s during construction work and later investigated more thoroughly in the early 21st century, the Charterhouse plague pit revealed dozens of human skeletons, laid out in layers with minimal spacing—men, women, and children buried with no markers or personal items, their lives compressed into a communal silence.

The remains from this and other London pits have since become vital to modern bioarchaeological research. Through DNA extraction and bone analysis, scientists confirmed the presence of *Yersinia pestis*, the bacterium responsible for the plague, in the teeth and jawbones of several individuals. This molecular evidence, preserved in dental pulp for centuries, was a breakthrough, proving not only the cause of death but offering new insight into the evolution of the disease itself.

Beyond the bacterium, the skeletons tell stories of their own. Many show signs of malnutrition, childhood stress, and heavy labor, suggesting that Londoners were already physically vulnerable before the Black Death struck. The pits also reveal how swiftly and indiscriminately the plague killed: there is no overrepresentation of the elderly or infirm. Young adults in their prime, pregnant women, and children appear in equal number. The disease spared no class, no trade, no age.

Other mass grave sites, such as those discovered under East Smithfield near the Tower of London, show evidence of careful organization despite the chaos. Bodies were laid in rows, not dumped, suggesting that even in the grip of mass mortality, efforts were made to treat the dead with some dignity. Clerics and laypeople, gravediggers and monks, all played roles in managing the flood of death, even as many fell victim themselves.

The social consequences of these plague pits were enormous. Entire family lines vanished. Labor shortages shifted the power dynamics between peasants and lords, hastening the collapse of the feudal system. Religious doubt grew, as the church proved unable to protect or explain the calamity. London would be struck again by plague in later centuries—most famously in 1665—but the scars of the 14th-century epidemic remained etched in its bones and psyche.

Today, the plague pits are occasionally rediscovered during construction projects, often with a mix of scientific interest and reverent discomfort. Their contents are carefully exhumed, studied, and sometimes reinterred, treated as both data and remembrance. They are not battlefields, but they are places of mass death. Not temples, but they echo with grief.

These pits remind us that the true horror of the Black Death was not its drama, but its **relentless ordinariness**—the way it invaded daily life and swept it away. It left no great monuments, no grand ruins. It left bones, piled quietly in trenches, telling us of a time when a city lost its breath and buried its dead in the earth as fast as it could dig.



## **Jewelry: Wealth, Craft, and Identity**

### **Russian artifacts**

#### **Scythian gold: Animal-style bracelets and torque from burial kurgans**

Across the windswept steppes of southern Russia and Central Asia, beneath mounds of earth rising like frozen waves from the grasslands, lie the remains of a vanished warrior-nomad elite whose artistry in gold has astonished the world. These are the Scythians, a confederation of Iranian-speaking tribes that dominated the Eurasian steppe from roughly the 9th century BCE to the 2nd century CE. Renowned for their cavalry, feared for their archery, and revered for their burial customs, the Scythians left behind some of the most intricate and symbolically rich jewelry in ancient history. Within their kurgans—burial mounds often containing horses, weapons, and elite human remains—archaeologists have uncovered torques, bracelets, and plaques of breathtaking craftsmanship, cast in gold and shaped in a unique, dynamic animal style.

This style, sometimes called "Scytho-Siberian," is defined by swirling compositions of predatory animals—lions, panthers, griffins, deer, and birds of prey—locked in combat or poised in dramatic motion. These forms were not merely decorative. They served as totemic emblems, status markers, and perhaps even ritual protectors for the dead. In Scythian belief systems, animals may have represented clan identities, spiritual guardians, or the eternal struggle between life and death.

Among the most iconic finds is the gold torque—a rigid, often open-ended neck ring that symbolized authority and high status. Torques discovered in kurgans in southern Russia and Ukraine often display finely modeled animal heads at each terminal: rams with curling horns, eagles with flared beaks, or snarling feline predators with sharp, curved fangs. These pieces, though solid and heavy, are also astonishingly detailed, with engraved fur patterns, inlaid eyes, and textured surfaces that suggest movement and power.

Excavations at Arzhan, Solokha, and Filippovka kurgans have yielded jewelry buried with both male and female elites, indicating that high-status adornment was not restricted by gender. In one burial, a noblewoman lay with elaborate earrings shaped like stylized birds, rows of beaded necklaces, and an intricately embossed bracelet depicting a stag leaping through foliage, its form so fluid it seems to run along the gold itself. Her jewelry was not placed as an afterthought—it was worn into death, part of her identity, her power, her memory.

What is striking about Scythian goldwork is not just its elegance, but its mobility. As nomads, the Scythians did not build stone cities or towering temples. Their wealth and art moved with them—on horses, on garments, and in the bodies they buried. Jewelry became a portable canvas for cultural expression, a way to display hierarchy, myth, and allegiance wherever they roamed. Even simple dress ornaments, such as belt plaques or cloak clasps, were adorned with coiling dragons or twin felines locked in mirrored combat.

The gold itself was likely sourced from the Ural Mountains and traded or extracted through metallurgy that reached surprising levels of sophistication. Scythian artisans employed

casting, chasing, repoussé, and granulation techniques, rivaling their Greek contemporaries. In fact, some of the most extraordinary Scythian pieces show Hellenistic influence, evidence of interaction with Greek colonies along the Black Sea. Yet the aesthetic remained uniquely theirs—wild, energetic, and symbolic of a world where human life was bound closely to animal nature and the cycles of the steppe.

The Scythians did not write their history in books. They left no inscriptions. But in their gold—stamped with hoof, claw, and wing—they left behind a visual language of astonishing clarity. Each torque clasped around a warrior's neck, each bracelet resting on a noblewoman's wrist, carried a story of power, ancestry, and the spirit world. These were not ornaments—they were declarations.

### **Kievan Rus amulets and pendants: Christian and pagan symbols, Baltic influences**

In the forested heartlands of early medieval Eastern Europe, along the trade arteries of the Dnieper and its tributaries, the kingdom of Kievan Rus emerged in the 9th and 10th centuries as a complex fusion of Slavic, Norse, Baltic, and Byzantine influences. It was a world in religious and cultural transition—paganism waning, Christianity rising—and nowhere is this more delicately expressed than in the jewelry worn around the necks of its people. The amulets and pendants of Kievan Rus, small and easily overlooked, are among the most revealing artifacts of identity, belief, and exchange in the region's early history.

Before the Christianization of Rus in 988 under Prince Vladimir, the people of this vast land worshipped a pantheon of nature gods and ancestral spirits. Jewelry from this era was infused with protective and symbolic power, crafted not only for adornment but to guard the wearer against misfortune. Amulets in the form of lunulae—crescent moon-shaped pendants—were especially common, often worn by women. These elegant, curved forms likely symbolized fertility and feminine strength, echoing older steppe traditions and Baltic spiritual motifs. Some lunulae were plain bronze or silver; others were adorned with punch-dot patterns, coiling wirework, or tiny bells, giving them a musical presence.

Other common pre-Christian pendants include axes and miniature weapons, symbols of male identity and possibly protective charms invoking the war gods or the spirits of ancestors. Amulets shaped like beasts, birds, or fish appear as well, often simplified to a schematic beauty, their purpose perhaps to guide or protect the soul. Occasionally, stylized phallus pendants are found, worn discreetly under garments, their use connected to fertility and ritual virility—residues of ancient beliefs that lingered long after formal conversion.

With the Christianization of Kievan Rus, new symbols appeared in jewelry, particularly the cross. The earliest crosses worn were often small and modest, made of bronze, iron, or tin alloys, worn by laypeople and sometimes even buried with them. Yet even these crosses bore traces of syncretism. Some feature interlacing patterns or solar motifs that seem to bridge the old and the new—designs that are Christian in shape but pagan in spirit. In a land where belief did not change overnight, these hybrid forms were common. Faith, like the jewelry that expressed it, was a layered and personal affair.

One especially fascinating type is the enkolpion—a hollow cross pendant used to contain relics, scripture fragments, or sacred soil. These were worn by clergy and sometimes by

nobility as potent symbols of both authority and sanctity. Crafted from copper alloy, silver, or even gilded bronze, many are decorated with Byzantine-style engravings, including images of Christ Pantocrator, saints, or the Virgin Mary. They often reflect the strong cultural pull of Constantinople on Kievan Rus, whose rulers married into Byzantine nobility and adopted Orthodox rites.

Yet even as Christian forms spread, older motifs persisted, especially in rural areas and among artisans influenced by Baltic and Norse styles. Jewelry from Novgorod, Smolensk, and Polotsk shows intertwined dragons, geometric patterns, and stylized animal heads—designs with no overt Christian symbolism, but rooted in a pagan artistic vocabulary that resisted erasure. Some scholars believe these were not purely ornamental but intentionally ambiguous—symbols that could pass as fashionable Christian forms while still resonating with pre-Christian belief.

Material also mattered. Bronze was common for everyday wear, while silver was reserved for higher-status individuals, often adorned with niello or engraved ornament. Amber, imported from the Baltic Sea, was valued for both its beauty and its apotropaic power—used in beads or set into metal pendants to ward off disease and misfortune. In the wealthier strata of Kievan Rus society, women wore neckrings and torques with suspended pendants, layering protective and aesthetic elements into intricate personal displays.

These amulets and pendants formed more than jewelry—they were statements of cultural alignment, spiritual preference, and social belonging in a world of shifting boundaries. A crescent moon beside a cross, a Slavic goddess beside a Christian saint, a Norse beast twined around an Orthodox icon—each object was a fragment of a belief system in flux.

In this jewelry, we do not see a people divided between old gods and new, but a society in motion, integrating, negotiating, and layering its beliefs. The necklaces worn in life often followed their owners into the grave, where they still whisper stories of a world that was neither fully pagan nor fully Christian, but unmistakably human.

### **Anglo-Saxon jewelry from Sutton Hoo (England): Cloisonné garnet work and status markers**

Beneath a low grassy mound in the East Anglian countryside of England, an ancient ship once rested, carrying the body—or perhaps only the memory—of a high-ranking Anglo-Saxon elite. The discovery of Sutton Hoo in 1939 unveiled one of the most breathtaking burial sites ever found in Europe, and at its heart was a glittering display of jewelry and regalia that transformed our understanding of early medieval England. Among these artifacts, the cloisonné garnet work stands as a signature of Anglo-Saxon artistry and as a clear marker of social and symbolic identity.

The burial—believed by many to belong to King Rædwald of East Anglia, who died in the early 7th century—was a ceremonial ship interment, echoing Scandinavian customs, but with unmistakable local character. Though the body itself had long since decayed in the acidic soil, the objects left behind spoke louder than bones ever could. Arrayed inside the 27-meter-long ship was a royal assemblage: weapons, feasting vessels, armor, textiles, and, most strikingly, jewelry of a richness rarely seen from this period.

Chief among these were the intricately crafted garnet-inlaid ornaments, a technique known as cloisonné. This involved setting tiny, shaped cells of gold—called cloisons—into a base and filling them with thin slices of polished garnet. The result shimmered like blood and fire, creating a mosaic of luminous red against gold filigree. These pieces weren't merely decorative; they were symbols of kingship, warrior prowess, and cosmological order.

The most iconic of these is the Sutton Hoo shoulder clasps, massive hinged fittings likely used to secure a heavy cloak or ceremonial garment. They feature interlaced animal motifs, highly stylized boars—a symbol of protection and strength—framed in garnet and gold. The level of precision is astounding: each garnet cell cut to microscopic size, fitted seamlessly, and aligned with patterns that suggest both naturalism and abstraction. The garnets themselves were not local; they likely came from India or Sri Lanka, evidence of the extensive trade networks that touched even early medieval Britain.

Another masterpiece is the gold belt buckle, an object of both function and beauty. Weighing over 400 grams, it contains a complex pattern of interwoven beasts, possibly symbolizing the binding of chaos or the taming of elemental forces—fitting for a man who wore it at the waist, the center of the body and of authority. Its hidden catch and hollow interior suggest it may also have held sacred relics or messages, making it a personal talisman as well as a statement of rule.

There were also smaller items—garnet-studded sword fittings, helmet embellishments, disc brooches, and purse lids—each one crafted with the same astonishing attention to detail. The purse lid, in particular, with its symmetrically mirrored scenes of birds of prey attacking ducks, conveys both aesthetic sophistication and symbolic weight. Such images likely reflected cosmological or mythic narratives lost to us, but still visible in their symmetry and intention.

What the jewelry of Sutton Hoo reveals is a culture deeply attuned to visual language. The Anglo-Saxons understood gold and garnet not just as materials of value, but as a way to speak power. To wear such objects was to cloak oneself in legitimacy—whether political, martial, or spiritual. The technical mastery of these objects also suggests highly specialized workshops and a class of artisans deeply embedded in elite patronage.

Perhaps most remarkably, the Sutton Hoo jewelry predates the full Christianization of England, and yet it is already filled with spiritual overtones. Some of the motifs—interlaced beasts, mirrored designs, hidden interiors—hint at ideas of duality, protection, and sacred concealment. When Christianity eventually took hold, the vocabulary of Anglo-Saxon jewelry would shift, but never fully abandon this layered, symbolic tradition.

Today, the Sutton Hoo jewelry is more than museum treasure—it is the material testament of a kingdom trying to define itself at the crossroads of pagan legacy, Christian future, and global connection. In each glint of garnet, each twist of gold wire, we see a society that believed in the power of ornament to define identity, tell stories, and anchor memory.

## **Mycenaean shaft grave rings (Greece): Epic scenes engraved in microscopic detail**

Long before the rise of classical Athens or the grandeur of the Parthenon, there flourished in Bronze Age Greece a warrior civilization whose legacy lived on in Homer's epics and whose craftsmanship still stuns with its precision and narrative depth. The Mycenaeans, rulers of fortified citadels like Mycenae and Pylos between roughly 1600 and 1100 BCE, were not only builders of palaces and masters of war—they were also storytellers in gold. Nowhere is this more vividly expressed than in the exquisite signet rings recovered from the royal shaft graves of Mycenae, discovered by Heinrich Schliemann in the 19th century and more recently excavated with modern precision.

The shaft graves, particularly Grave Circle A, yielded a treasure trove of artifacts that shocked the world: gold masks, swords with inlaid blades, and over thirty intricately engraved gold rings. These rings, used both as seals and as symbols of status, were engraved with scenes so detailed that many were invisible to the naked eye, only revealed under magnification. Within their tiny elliptical faces, barely a few centimeters across, artisans carved entire mythological and ceremonial scenes with astonishing finesse.

One ring from Grave Circle A shows a goddess flanked by lions, seated beneath a tree while supplicants approach her. Another depicts a boat manned by oarsmen, possibly a funerary vessel or a voyage of the soul. Still another shows a warrior in a chariot, charging into battle, his spear raised, the horses rendered in a dynamic sprint. These were not random motifs; they were chosen with intention, reflecting the status, ideals, and perhaps even the personal myths of the ring's owner. Each ring is a microcosm, encapsulating the values of the Mycenaean elite: divine favor, martial power, ceremonial authority, and a deep connection to a symbolic world.

The method of engraving these scenes required not just immense skill, but specialized tools—fine gravers, drills, and polishing stones. Many of the rings were created using a technique known as intaglio, where the image is cut into the surface so that it can leave a raised impression when stamped into clay or wax. This also suggests a dual life for these rings: worn as personal adornment and used as administrative or ceremonial seals. The owners may have marked their property, closed official documents, or sanctified ritual items with these images—embedding themselves symbolically into the material culture around them.

The material itself—solid gold—was both status and statement. Gold was rare, and its use in rings was reserved for the most powerful individuals: warriors, priest-kings, or possibly their wives. The wealth displayed in the shaft graves points to an elite that not only ruled by force but also by divine association. The motifs often parallel Minoan religious imagery, showing women in dominant positions, sacred animals, and symbols of fertility and transition, suggesting a cross-cultural influence from Crete.

The discovery of additional rings in the nearby Griffin Warrior tomb in Pylos in 2015 confirmed that this craftsmanship was not isolated to Mycenae. There too, a ring was found bearing an extraordinary battle scene—tiny warriors in dynamic poses, their limbs overlapping in a swirl of conflict. Scholars believe the scene reflects not only military valor but a mythic or cosmological event, rendered with the same narrative compression found in much later Greek art and poetry.

These Mycenaean rings are not simply beautiful objects; they are narrative devices, each one a story in miniature. They remind us that long before the invention of writing systems in Greece, stories were told through image and symbol—encoded into the very gold that marked one's passage through life and death. The rings accompanied their wearers into the afterlife, continuing to proclaim their status, their beliefs, and their connection to the divine.

In the eyes of those who wore them, these were not ornaments but portals—gateways to identity, memory, and myth. To hold one today is to hold a world no larger than a coin, but infinitely deep in meaning.

### **Etruscan gold from Italy: Granulation and unique clasps**

Long before Rome cast its long shadow across the Italian peninsula, a civilization flourished in the hills of central Italy that rivaled its future conqueror in refinement and artistry. The Etruscans, dominant from roughly the 8th to the 4th centuries BCE, left behind no surviving epic literature or grand temples in stone. But in their jewelry, particularly their goldwork, they achieved a form of visual poetry that still astonishes with its intricacy, innovation, and quiet grandeur. Among their many contributions to the art of adornment, the Etruscans were masters of granulation—a technique so precise it borders on the miraculous—and creators of clasp systems that remain unmatched in elegance and ingenuity.

The Etruscans believed deeply in the continuity between life and death, and their tombs were filled with personal items that the dead might need or treasure in the afterlife. Jewelry was not mere decoration; it was a marker of lineage, protection, and devotion. Within tombs at sites like Cerveteri, Tarquinia, and Vulci, archaeologists have uncovered earrings, necklaces, fibulae (brooches), and diadems made from gold so fine it feels impossibly light, yet carries centuries of accumulated symbolism.

Their most iconic technique, granulation, involved applying hundreds—or even thousands—of tiny gold spheres, some less than a millimeter in diameter, onto a gold surface in decorative patterns. This was done without solder in the modern sense; instead, the Etruscans used a subtle chemical fusion process that caused the gold to bond at molecular points of contact. The result was stunning: rosettes, spirals, checkerboard grids, and abstract patterns that shimmered like embroidery made of sunlight. These were not only technical marvels but symbols of elite status, each piece requiring immense labor and skill, accessible only to the wealthiest and most powerful.

One of the most celebrated examples is the Earring of the Tomb of the Regolini-Galassi, dated to the 7th century BCE. Shaped like a crescent moon and covered in rosettes, spirals, and tiny beaded borders, it represents the peak of Etruscan granulation and form. It was found in a tomb alongside other gold treasures, likely buried with a noblewoman of high status. These earrings weren't made to be subtle—they were meant to dazzle, to catch light, to announce presence.

Equally innovative were the clasps and fastening mechanisms the Etruscans used in necklaces and fibulae. Unlike modern standardized hooks and chains, Etruscan jewelers engineered complex hinges, pressure-fit caps, and sliding pins that were seamlessly integrated into the aesthetic of the piece. Many clasps were not simply hidden—they were celebrated, often

taking the form of lion heads, birds, or mythological creatures, merging function and ornamentation. In some examples, a necklace's clasp was also its central decorative motif, turning necessity into focal point.

These clasps also served a cultural purpose. In a society where jewelry was passed down through generations, worn in ceremony, and taken into the grave, a secure and intricate clasp was a symbol of continuity and craftsmanship. The closure itself could be an act of ritual—fastening protection around the neck, sealing the identity of the wearer into gold.

Etruscan goldwork also reflected the cosmopolitan nature of their world. While the techniques were homegrown, there was significant influence from the Eastern Mediterranean, especially from Phoenicia and Egypt. Motifs such as lotus flowers, winged sphinxes, and palmettes appear frequently, adapted into a distinctly Italic style. Yet, Etruscan pieces retain a softness and intimacy that distinguishes them from their Greek or Egyptian counterparts—less about divine authority, more about personal connection and human presence.

Today, Etruscan jewelry survives in museums more often than their cities or language. Their inscriptions remain only partially understood, their political history shadowed by Roman conquest. But through the luster of a granulated pendant or the quiet click of an ancient clasp, their world still speaks. It speaks of women walking through courtyards with golden diadems glinting in the sun, of aristocrats marking status not in stone but in detail, and of artisans whose patience and genius has endured longer than the cities they served.

### **Islamic-era jewelry (Syria, Iran): Use of calligraphy, gems, and technical excellence**

From the glittering courts of Damascus to the scholarly cities of Isfahan, the Islamic world of the medieval era crafted a visual culture that merged geometry, faith, and elegance into every facet of daily life—including the intimate world of personal jewelry. In the workshops of Syria, Iran, and greater Persia, goldsmiths and lapidaries created pieces that were not just adornment, but theological declarations, mystical meditations, and miniature masterpieces of technical artistry. Jewelry from this era speaks in a language of calligraphy, celestial design, and gem symbolism, forming a delicate synthesis between body, spirit, and intellect.

Unlike many earlier traditions where figural imagery dominated, Islamic jewelry expressed meaning through form and script. The prohibition or discouragement of depicting living beings in religious art did not limit creativity—it redirected it toward abstract beauty. Circular motifs, interlacing arabesques, and above all, calligraphic inscriptions became the heart of design. A gold ring or pendant was not merely inscribed—it was infused with the divine, the script often taken from the Qur'an or from invocations of divine names, blessings, and talismanic phrases.

One of the most characteristic elements of Islamic-era jewelry from the region is the use of engraved gemstones. Carnelian (*aqeeq*), turquoise, jade, and sometimes lapis lazuli were cut into ovals or flat surfaces and etched with Kufic or Naskh script, then set into gold or silver rings, pendants, or seal mounts. These inscriptions might read “*Ya Allah*” or “*Muhammad is the Messenger of God*”, or carry more protective phrases such as “*al-mulk lillah*” (dominion belongs to God) or “*ya Hafiz*” (O Protector). The gems themselves were believed to have

specific spiritual and medical properties—carnelian warded off misfortune, turquoise protected against the evil eye, and jade soothed the soul.

Syrian and Iranian artisans also excelled in combining filigree, enamel, and granulation, though their versions were more delicate and tightly controlled than earlier Etruscan styles. Earrings from the Fatimid and Seljuk periods often feature intricate domed structures, dangling chain elements, and subtle gemstone accents. These were not necessarily large pieces, but they glowed with precision, balance, and meaning. Many bore lobed medallions or rosette forms, echoing architectural motifs and manuscript decoration, ensuring that the language of ornament was consistent from mosque to market to mirror.

A particularly exquisite tradition emerged in the Persian Safavid period (16th–17th centuries), where jewelry began to reflect the poetic and mystical undercurrents of Persian culture. Amulets and locket were inscribed with lines of Persian poetry, praising divine beauty, love, or wisdom, often set into pendants worn close to the heart. Some necklaces contained tiny Qur'an scrolls or miniature prayer books, encased in protective boxes of enameled gold, their surfaces painted with flowers, birds, and blossoms in a style known as polychrome enameling.

Clothing and jewelry were often designed as part of an integrated visual statement. Women's jewelry—necklaces, bangles, and headdress elements—was worn in private spaces and at family gatherings, and often reflected regional styles, with variations in shape and materials between Damascus, Isfahan, Tabriz, and smaller provincial centers. Men too wore rings and amulets, especially signet rings that bore both their names and invocations of divine protection, a personal talisman and identity marker in one.

Among the most technically accomplished pieces are those which combine multiple materials and languages—a ring from 12th-century Iran may feature a Persian poetic inscription in Arabic script, set on Indian emerald, mounted in a Turkish-style silver base, showcasing the global nature of Islamic trade and craftsmanship. These objects moved across borders, through markets in Cairo, Aleppo, and Samarkand, and into treasuries and trousseaus, carried along by pilgrims, merchants, and diplomats.

Islamic-era jewelry from Syria and Iran was thus more than beautiful—it was a wearable theology, a personal architecture of belief. In its elegant proportions and sacred texts, its luminous stones and whispered verses, it formed a spiritual geography that adorned not just the body, but the soul.

### **Viking arm rings: Both currency and social markers, often found in hoards**

On the windswept coastlines and mist-veiled fjords of Scandinavia, where longships cut through black water and warrior chieftains ruled over scattered settlements, the arm ring was more than ornament. It was a currency, a contract, a legacy, worn not only as a symbol of wealth but as a mark of identity and allegiance. In Viking society, silver was the metal of choice—not just for its beauty, but for its utility—and nowhere was this more clearly embodied than in the arm rings found in graves and buried hoards across the Norse world.



These rings, often thick bands of twisted or coiled silver, were crafted in a variety of styles—from simple spirals to ornate patterns hammered and chased with zoomorphic or geometric designs. Some were designed to be flexible, worn snugly around the upper arm or wrist; others were rigid, forged in ovals or crescents that could be stacked or overlapped with other bangles. Regardless of style, arm rings were highly personal items, worn by men and women, often from adolescence until death. Many were made to be broken, bits of silver chipped off for trade or tribute when needed, making them both store and measure of wealth.

But their role was far deeper than that of mere portable silver.

In the sagas and poetic traditions, arm rings appear as gifts of honor, bestowed by kings and chieftains upon their warriors and retainers in recognition of service, loyalty, and valor. To receive an arm ring from a lord was to be bound by oath—a sacred tie in a culture where spoken words and public deeds carried the weight of law. These gifts were often given in ritual contexts, perhaps at seasonal gatherings or after a successful raid, where the leader would stand before the hall and distribute rings to his men, forging a web of social obligation and mutual protection.

Archaeologically, arm rings are often discovered in hoards, particularly in Britain, Ireland, and Scotland, where Viking raiders, settlers, and traders buried caches of silver for safekeeping or ritual. Some of these hoards—like the Galloway Hoard or the Cuerdale Hoard—contain dozens of such rings, cut, bent, or coiled, sometimes alongside coins from Anglo-Saxon, Carolingian, and Islamic sources. The rings served not only as adornment or trophy, but as part of a silver economy in which weight mattered more than imagery. Pieces were tested with knives or nicks to verify purity, and then traded by weight like hacksilver.

However, some rings were never used as currency. Found intact, uncut, and carefully placed in graves or ritual pits, these rings carry a different meaning—symbols of status, identity, and continuity. In several high-status burials in Scandinavia, arm rings are placed on the arms of the dead, sometimes two or three per arm, or included among the grave goods with weapons, tools, and combs. The rings may have functioned as talismans or as heirlooms, passed down through generations, their silver saturated with memory and lineage.

In design, many arm rings show clear regional styles. In Norway and Denmark, twisted rods and terminal ends—sometimes shaped like animal heads—are common. In the British Isles, rings often bear hammered dot patterns, cross-hatching, and inlaid decoration. A few rare examples are gilded or made of gold, likely the property of the elite, though silver remained the more democratic and accessible metal.

What binds all of these forms together is the multiplicity of function—at once beautiful, practical, symbolic, and transactional. The arm ring was a wearable economy, a statement of power, a promise made in metal. In the Viking imagination, silver carried the weight of oath and fate. To wear an arm ring was not only to show one's wealth, but to mark one's place in the web of kinship, duty, and honor.

Today, these rings lie in museums and vaults, their surfaces worn smooth by centuries of soil and silence. Yet when unearthed, they still carry the echo of the voices that gave and received them—chiefs and shieldmaidens, traders and warriors, hands extended in loyalty, the flash of silver sealing a bond that neither sea nor time could easily break.

## Weapons: Forged for Battle, Buried in Peace

### Russian examples

#### Weapons from Ladoga and Gnezdovo: High-quality swords with Frankish blades.

In the damp, peaty soil of burial mounds around Ladoga and Gnezdovo, two major early medieval trade and settlement centers in what is now northwestern Russia, archaeologists have unearthed weapons of such quality and origin that they speak not only to warfare, but to the deep interconnectedness of Eurasia. Chief among these finds are swords of foreign make, many forged in the lands west of the Rus', and yet buried in the hands of warriors who lived and died along the rivers that linked the Baltic to the Black Sea.

The swords discovered in these regions are often of Frankish origin, their blades imported or acquired through trade, war, or tribute. Many are of the Ulfberht type, a mark often inlaid in the fuller of the blade with Latin letters, sometimes rendered with a cross at the beginning. These inscriptions—+VLFBERH+T, or variations thereof—denote a lineage of weapon production that spanned generations of smiths from the Frankish realms, likely near the Rhine. What made these swords prized was not only the name but the metallurgical superiority. Ulfberht blades were forged with higher carbon content than most contemporary weapons, making them stronger, more flexible, and more enduring in combat.

Yet what is remarkable is not simply their origin, but their presence so far east, deep into the river corridors of Rus'. At Ladoga—often considered the earliest urban settlement in Russia—such blades were discovered in elite graves, alongside mounts, horse trappings, and decorative fittings. They were not common tools of warfare; they were symbols of authority, prestige, and perhaps personal achievement. In Gnezdovo, near Smolensk, several richly furnished burial mounds yielded swords with imported blades paired with locally made hilts or scabbards. The fusion of West European steel with Rus' craftsmanship and ritual practice reveals a culture that both valued foreign technology and reinterpreted it within its own traditions.

The men buried with these swords were not simple raiders or mercenaries. Their graves suggest status and structure: weapons laid across the body, sometimes wrapped in cloth or leather; spears and axes arranged with care; and often, horse remains nearby, indicating the importance of mounted combat and a warrior's bond with his steed. In some mounds, weapons were deliberately broken or bent—a ritual gesture, possibly intended to "kill" the weapon and release its spirit, or to prevent its use by the living.

One notable sword from Gnezdovo bears evidence of re-hilting, its original crossguard replaced with a locally forged bronze fitting, engraved with geometric patterns and inlaid with silver. This adaptation speaks to a long period of use, and perhaps even intergenerational ownership. The blade may have come from the Frankish world, but its identity was reshaped in Rus'—wielded, repaired, buried, and remembered.

Other weapons from these sites include axes and spears of both practical and ceremonial design. Some axe heads are small and broad-bladed, designed for combat rather than woodcutting, while others feature slender beards and ornate engravings. Spearheads vary in

size and shape, with some designed for throwing, others for thrusting. These, too, were placed in burials with care and purpose. They were not simply tools of survival—they were extensions of the self, and in death, they traveled with their owners to whatever world awaited beyond the grave.

The presence of such weapons—especially high-quality imported swords—reveals a layered world of status, connection, and belief. To own a Frankish blade was not merely to own superior steel; it was to participate in a transcontinental web of commerce, diplomacy, and cultural exchange. It meant bearing into battle a weapon that had passed through many hands and held many meanings.

In the lands of Ladoga and Gnezdovo, where rivers served as roads and burial mounds rose quietly along the banks, these weapons still lie—silent but eloquent. They tell of a warrior culture where power was carried at the hip, where craftsmanship crossed borders, and where death was not the end, but the beginning of a story written in steel.

### **Mongol-period composite bows and arrows from Siberia**

In the vast and silent reaches of Siberia, beneath the frost and earth of forgotten graves, lie remnants of an empire that once swept across the world like fire on dry grass. The Mongol era, with its unmatched expansion and military innovation, left not only chronicles of conquest and empire, but physical traces of its lethal precision—composite bows and arrows, recovered from burials across southern Siberia and Central Asia. These artifacts, preserved by dry soils and permafrost, offer a rare look at the ingenuity and strategic brilliance of Mongol warfare, distilled into the weapons that delivered their reach.

The Mongol bow was not the crude longbow of forest hunters nor the elegant recurve of distant cultures. It was a highly engineered composite weapon, constructed from layers of wood, horn, and sinew, bound with natural glues that allowed the bow to store exceptional power in a compact frame. The asymmetrical shape, shorter on the lower limb, made it ideal for horseback use. Warriors could fire while riding at full gallop, forward or backward, from either hand—a practice observed and feared by enemies from China to Hungary.

Excavations in regions such as Tuva, Khakassia, and the Altai Republic have yielded rare but invaluable remains of these weapons. Though time has often destroyed the organic elements—glue, wrapping, sinew—the horn strips and wood cores, along with the metal reinforcements and arrowheads, survive to reveal the form and function of Mongol archery technology. In one burial near Lake Baikal, the fragments of a bow were found alongside a full quiver of iron-tipped arrows, their shafts meticulously crafted, fletched with bird feathers, and bundled with leather cords. The arrowheads themselves were diverse: broadheads for unarmored enemies, bodkin points for piercing chainmail, barbed tips for hunting or causing maximum internal damage.

Mongol bows were personalized instruments. Warriors were trained from early youth to treat their bow as an extension of the body—maintaining, tuning, and storing it with care. Some arrows bore inscribed marks or notches—possibly clan symbols, magical charms, or indicators of arrow type. In a tomb near the Yenisei River, an archer was buried with his bow dismantled and laid across his chest, the horn strips and grip still intact. A small leather case

beside him held spare strings, wax, and maintenance tools, reflecting not only his skill but the cultural reverence for the bow as a sacred object.

These weapons were not merely tools of conquest—they were symbols of identity. In Mongol society, the bow was part of the warrior's soul. Success in life was measured in part by skill at the bow, and the afterlife was imagined with the same clarity: a rider with bow in hand, galloping across the eternal steppe. Ritual offerings sometimes included broken bows or arrow fragments, intentionally “killed” before burial, much like swords in European or Rus’ burials. In elite graves, the bow case itself—often made of carved or painted leather—was as finely crafted as the bow within, adorned with geometric patterns or stylized animals, echoing the designs seen in Mongol textiles and saddle gear.

Notably, the Mongol bow influenced neighboring cultures. Variants of the composite bow style began to appear in Russian, Turkic, and Chinese military contexts, either as imitations or through direct military adoption. In the Russian steppes, hybrid forms emerged—bows made with local woods but mimicking the Mongol structure. These too appear in graves, especially among warrior-nobility who likely served or fought under Mongol rule.

The discovery of Mongol-era archery gear in Siberia reminds us of the precision and discipline behind the Mongol military machine. Their conquest was not just brute force—it was organization, training, and the ability to deliver death at impossible speed and range. And yet, these bows were also personal, often buried with great care, treated not as expendable tools but as extensions of life itself.

They lie now in frozen tombs, their curves distorted by time, their strings long dissolved. But when reconstructed and studied, they reveal a world in which the pull of a bowstring meant not only war, but skill, honor, and the memory of a rider disappearing over the horizon.

### **Viking swords from the Thames and Scotland: Pattern-welded blades, inscriptions like “ULFBERHT”**

From the murky depths of the River Thames to the mist-shrouded lochs of Scotland, swords have surfaced that once cut through more than flesh—they carved status, identity, and allegiance into the early medieval world. These are pattern-welded Viking-age swords, objects of exquisite craftsmanship and brutal efficiency, whose survival beneath water and earth has preserved not only iron and steel, but names, legends, and silent oaths. Among them, the most famous bear a singular inscription: +ULFBERHT+—a name forged in metal, revered across Europe, and still debated by scholars.

Discovered during river dredging, construction work, and archaeological surveys, swords from the Thames and Scotland often show signs of ritual deposition. They were not dropped in battle; they were placed—deliberately, sometimes with care—into rivers, bogs, or lakes, a practice that likely held deep spiritual or ceremonial meaning. In Norse and broader Germanic belief systems, water was not just a barrier—it was a threshold, a place where weapons might be offered to gods or ancestors, or where a warrior's death was ritually echoed by the surrender of his blade.

These swords are notable not just for their deposition, but for their technical sophistication. Most are pattern-welded, a process in which iron and steel rods were twisted, folded, and fused to create blades with both flexibility and strength. The result was a marbled or herringbone pattern along the surface, visible even after centuries in the ground. These blades could withstand powerful blows without shattering—essential in a world where shields split and armor gave way—and they were also aesthetic declarations, each one a visual fingerprint of the smith’s art.

The ULFBERHT swords, dozens of which have been found across Northern and Western Europe, are the most famous examples. Some have been recovered from the Thames, others from Scottish rivers and graves. The name ULFBERHT is inlaid in iron or welded into the blade itself, sometimes with a cross or other symbols before or after. Scholars believe Ulfberht was likely not a single smith but a workshop or lineage of master swordmakers, probably located in the Frankish realms near the upper Rhine. Their blades were exported, traded, or looted across Europe from the 9th through the 11th centuries.

But the presence of ULFBERHT swords in Britain, particularly in Viking contexts, reveals something deeper. These swords were not merely weapons—they were marks of elite status, often owned by chieftains or professional warriors. To carry such a sword was to wear a badge of connection to a broader world—of trade, battle, and prestige. Some swords even bear imitation inscriptions, slightly corrupted versions of the ULFBERHT name, suggesting that counterfeits were made to satisfy demand or to replicate the aura of power the original blades possessed.

In Scotland, discoveries near sites like Galloway and Isle of Eigg have revealed swords with distinctive pattern-welded cores, their grips wrapped in organic materials long decayed, but their blades still bearing the glint of folded iron. In some cases, the swords were found in burial contexts, interred with warriors alongside spearheads, shields, and personal items. In others, they were found in isolation in rivers or bogs—offerings or perhaps the result of lost battles. Each find adds to a mosaic of martial culture that valued not just killing power, but craftsmanship, origin, and the symbolic weight of steel.

The balance of these weapons is often praised in modern reconstructions: the blades taper toward the point, their weight distributed for fast, powerful strikes. Many bear fullers—grooves along the blade’s center to lighten the weapon—and hilts made of wood, bone, or wrapped iron. Some display silver or copper inlays on the crossguards, turning a weapon of war into a personalized artifact of status and memory.

To pull a sword from the Thames or the Scottish lochs is to disturb a ritual silence. These weapons were placed with intent, part of a world where violence and reverence were inseparable. The river was a witness, the sword a message.

Today, they reside in museums—still, polished, and labeled—but their origins ripple outward: from Frankish forges to Norse ships, from muddy battlefields to sacred waters. In the patterned iron of their blades, we see the pulse of a world where metal carried the soul of a warrior, and the name ULFBERHT, etched in steel, was more than a maker’s mark—it was a word of power.

## **Roman gladii and pugioes: Found in forts and tombs, often with intricate hilts**

The Roman army did not conquer the known world with brute force alone—it advanced behind a wall of discipline, precision, and standardization. Among the most iconic symbols of that machine-like efficiency were the gladius and the pugio—the short sword and its companion dagger that were carried by legionaries across the empire. These weapons, compact yet deadly, were not only tools of war but expressions of identity, authority, and imperial pride. Their remains, recovered from forts, tombs, and battlefields stretching from Britain to the Near East, offer a tangible connection to the soldiers who built and defended Rome’s frontier.

The gladius, derived from Iberian prototypes during the Republic, evolved into the primary sidearm of Roman infantry. Typically about 60 to 70 centimeters in length, it was designed for close-quarters combat—thrusting rather than slashing, favored for its efficiency in the tight formations of the Roman line. Its short, double-edged blade allowed for deadly precision when used in coordination with the scutum (shield), enabling a soldier to stab forward in controlled, rapid motions while maintaining defense.

Archaeological finds from Roman military sites such as Vindolanda and Housesteads along Hadrian’s Wall in Britain, and Carnuntum on the Danube, have yielded gladii in remarkable states of preservation. Many of these swords retain not only their iron blades but parts of their hilts and scabbards, which were often richly decorated. Hilts could be made from bone, ivory, or wood, sometimes inlaid with silver or bronze. Pommel caps and guards were cast in intricate designs—some featuring eagles, laurel wreaths, or mythological motifs, symbols meant to inspire and identify.

The pugio, the Roman dagger, served both as a weapon of last resort and a badge of rank and readiness. Its wide, leaf-shaped blade made it effective for stabbing, and it was often carried in an elaborately decorated sheath suspended from a belt. Officers and higher-status soldiers frequently owned custom pugioes, many of which have been found in tombs or caches, their blades engraved with names, mottos, or dedications to gods. Some even served as personal seals, used in place of a signature for military documents and correspondence.

One extraordinary example, discovered in a burial site near Mainz, features a pugio with a silver-inlaid hilt and a Latin inscription that reads: *Virtus Militum*—“The Valor of Soldiers.” The blade was not buried alone; it was laid beside the deceased’s cuirass, belt fittings, and a cup of fine Samian ware. This was not just a soldier; this was a man remembered as a warrior, his dagger a token of both service and identity.

Roman gladii and pugioes were not mass-produced in the modern sense, but their forms were highly standardized, reflecting the Roman preference for order and function. Yet personalization still flourished. Legionaries often engraved their names or service numbers into the weapons, both to prevent theft and to imbue the blade with personal presence. In some cases, blades have been found with notches and nicks, scars from battle that tell of real use—deflected strikes, armored opponents, or moments of chaos preserved in steel.

In funerary contexts, especially in the provinces, these weapons sometimes appear in the tombs of veterans, placed alongside military diplomas, belts, and ceremonial gear. Their inclusion was not always practical; by the time of burial, the owner may have been long retired from battle. Instead, their presence reflects a lifelong association with Roman military

identity, a sense that the gladius and pugio were as much a part of the man as his name or lineage.

Though later replaced by longer spatha swords as cavalry and frontier warfare evolved, the gladius and pugio remain the defining blades of Rome's imperial height. They were the weapons of conquest, of civil defense, of the march and the siege. Their design was not ostentatious, but efficient, and in that efficiency lay a certain brutal elegance—compact, direct, and effective.

To hold one today is to grasp the tool of a man who stood shoulder to shoulder with others, advancing in rhythm, stabbing forward into enemy lines under the sunburst of an imperial eagle. These blades forged not just victories, but provinces, borders, and history.

### **Bronze Age daggers (Ireland): Made from imported tin and copper with elegant handles**

Long before iron and steel reshaped the battlefield, Ireland's warriors and chieftains carried weapons cast in a softer but no less revered metal—bronze. In the second millennium BCE, during the flourishing of the Bronze Age, the Irish landscape was a patchwork of tribal communities, hilltop forts, and sacred sites where the natural and the supernatural mingled. Amid this world of ritual and prestige, the bronze dagger emerged not only as a practical weapon but as a deeply symbolic object, forged from imported materials and shaped with remarkable artistry. These daggers—small, elegant, and sometimes ceremonial—offer a glimpse into the wealth, trade, and symbolic power of prehistoric Ireland.

Unlike flint or bone tools of the earlier Neolithic, bronze daggers represented a new level of technological and social sophistication. Crafted from a mix of copper and tin, both of which had to be acquired through trade networks reaching into Britain and mainland Europe, the very materials of these daggers signified far-reaching connections. The copper often came from deposits in southwest Ireland, such as Mount Gabriel, while tin may have arrived via exchange routes from Cornwall, underscoring the island's participation in the wider Atlantic Bronze Age world.

The daggers themselves vary in form, but the finest examples feature triangular blades with midribs—a raised spine down the center to add strength—cast with incredible precision for the time. They were not large; typically around 20 to 30 centimeters in length, these were weapons designed for close combat or status display, not battlefield slashing. But what they lacked in size, they made up for in detail and refinement.

Their handles were a point of pride, often made from organic materials now lost to decay—wood, bone, or antler—but occasionally preserved in waterlogged contexts. In some rare cases, the bronze hilt itself was cast in one piece with the blade, or riveted together with fine copper alloy pins. Decorative elements included ribbing, geometric incisions, or inlaid patterns, sometimes mimicking organic textures like cord or leather. The daggers may have been worn suspended from belts or hung across the chest, serving as visible markers of status in both life and death.

Excavations of bogs, lakeshores, and cairn burials have yielded daggers placed with deliberate care, often alongside other prestige items—beads, ceremonial axe heads, gold lunulae. In one notable find from County Armagh, a bronze dagger was buried in a stone-lined cist beside the remains of a young man, his grave marked with a ring of standing stones. The dagger was not just a tool—it was a token of identity, perhaps indicating a role as a warrior, leader, or even a ceremonial functionary.

Some daggers appear to have never been used in combat. Their edges remain sharp and unblemished, their hilts untouched by wear, suggesting they were made purely for display or burial, part of a symbolic economy in which weapons held power beyond their practical use. Others show signs of repeated sharpening or repair, hinting at long use or heirloom status—objects handed down through generations, accumulating memory and significance.

The dagger also held a place in Bronze Age cosmology. In Irish myth and folklore—much of it recorded millennia later but echoing older beliefs—blades are often associated with transformation, initiation, and kingship. Some scholars speculate that Bronze Age daggers may have played a role in rituals involving oaths, sacrifice, or the marking of sacred space, their gleaming surfaces catching firelight during ceremonies at megalithic sites or on windswept hills.

In craftsmanship, material, and symbolic weight, these daggers bridge the worlds of the everyday and the ceremonial. They are tools of power, but also of beauty and connection—forged in fire, cast in molds shaped by ancestral knowledge, and polished to reflect the hands that bore them. In their edges and hilts, they carry not only the story of Bronze Age Ireland, but the memory of those who walked its forests and fields with blades at their side and meaning in their grip.

### **Islamic swords and scimitars: Damascus steel and decorative inlays**

In the workshops of medieval Persia and Syria, swordsmiths crafted blades that would come to embody not just martial excellence, but poetic beauty. These were the Islamic swords and scimitars of the golden age—graceful in form, fearsome in function, and revered both in battle and in legend. Chief among them were weapons forged from Damascus steel, a material as mysterious as it was lethal, with blades patterned like flowing water and honed to terrifying sharpness. In the Islamic world, the sword was not only a weapon of war—it was a symbol of justice, divine authority, and personal virtue.

The most iconic Islamic sword form is the curved scimitar, known variously as the *shamshir*, *saif*, or *kilij*, depending on region and period. These blades evolved from straight double-edged swords of earlier centuries into elegant, single-edged curves, optimized for mounted combat and powerful slicing cuts. But it was not just their shape that set them apart—it was the material. True Damascus steel, known in Arabic as *fulad*, was renowned for its distinct wavy or patterned surface, created by a crucible process involving high-carbon steel ingots (*wootz*) imported from India and Sri Lanka.

The forging of Damascus steel required extraordinary skill. The ingots were heated and worked slowly, preserving their carbon structure while allowing impurities to align into microscopic banding patterns. The result was a blade of remarkable flexibility and hardness,



capable of cutting through armor or enemy blades. The patterns—ladder, rose, or swirling water—became the signature of a master smith, each blade as unique as a fingerprint. Swords made in Damascus, Aleppo, and Isfahan became prized possessions not only among Islamic armies, but also by European knights, who traded fortunes to acquire one.

But Islamic swords were not merely technical marvels—they were texts in metal. Many surviving examples feature inlays of gold, silver, or copper, often in Arabic calligraphy, running along the spine or flat of the blade. These inscriptions might include Qur’anic verses, such as *“Victory is from God”* or *“There is no sword but Dhū’l-Faqār”*—a reference to the legendary bifurcated sword of Ali ibn Abi Talib, cousin of the Prophet Muhammad. Others bore names of sultans, blessings, or talismanic scripts believed to offer protection or inspire courage.

The hilts of these swords were equally expressive. Guards and pommels were made from jade, rhino horn, ivory, or finely carved wood, set with gemstones or adorned with enamel. Some featured cross-shaped guards, a vestige of early Islamic military contact with Christian powers, adapted to the grip preferences of mounted warriors. The scabbards, often made from tooled leather or wood covered in velvet or silk, were decorated with metal fittings inscribed with poetry or honorifics, transforming a utilitarian sheath into a display of wealth and refinement.

One notable sword, housed in the Topkapi Palace Museum in Istanbul, bears the name of Sultan Saladin, the Kurdish leader who recaptured Jerusalem in the 12th century. Though its attribution is debated, the blade is a masterpiece—etched with geometric scrolls, Qur’anic inscriptions, and a blade of rippling steel, sharp as a whisper. It is not alone. Dozens of similar swords, some tied to the Mamluks, Safavids, and early Ottomans, survive in museum collections around the world, each telling a story of power, piety, and patronage.

These swords were not only weapons of the battlefield. In courtly contexts, they were given as gifts of honor to generals, poets, and foreign emissaries. In some regions, they were passed down through generations as family heirlooms, kissed before battles and worn during ceremonies of state. When not used, they often hung in mosques or palaces, visible reminders of divine sanction and martial strength.

To hold such a sword was to carry more than steel—it was to bear an object alive with meaning, forged in fire and shaped by centuries of belief. The curve of the blade mirrored the crescent moon, the sacred script sang of God, and the very act of drawing it was a blend of ritual, threat, and reverence.

### **Anglo-Saxon and Norman battle gear: Helmets, shields, spearheads**

In the muddy fields and wooded glades of early medieval Britain, where kingdoms rose and fell in the span of a generation, the tools of war were not only practical—they were deeply symbolic. From the splintered shield walls of the Anglo-Saxon *fyrð* to the mounted charges of Norman knights, battle gear served as both protection and proclamation. Among the most telling artifacts of this world are the helmets, shields, and spearheads recovered from graves and battlefield sites, each piece bearing the wear of violence and the mark of its maker.

One of the most iconic items of Anglo-Saxon warfare is the helmet, and none is more famous than the ornate, mask-like example found at Sutton Hoo. Though exceptional in its richness, it reflects elements common to elite wargear of the period: a close-fitting iron cap, often formed from multiple riveted plates, and sometimes a protective face guard or nasal bar. The Sutton Hoo helmet, with its embossed eyebrows, mustache, and stylized dragon motif running from brow to nape, was not merely armor—it was a symbol of kingship, worn perhaps in life and certainly in death as a mark of royal identity.

Other, more utilitarian Anglo-Saxon helmets found at sites like Coppergate in York and Benty Grange in Derbyshire show a mix of influences—Roman, Germanic, and Scandinavian. The Benty Grange helmet, for instance, includes an iron boar crest, echoing pagan symbols of protection and martial strength. These helmets were typically reinforced with iron ribs, lined with leather or cloth, and tied under the chin. They offered solid defense against glancing blows but relied heavily on the strength of the shield and the discipline of the shield wall to protect their wearer fully.

Shields were the most commonly used defense in both Anglo-Saxon and Norman warfare. They were round in early Anglo-Saxon use, made from linden or poplar wood and faced with hide. A central iron boss protected the handgrip and allowed the shield to double as a striking weapon. These shields were often painted or marked with symbols—crosses, beasts, or geometric patterns—each carrying clan or personal significance. In Anglo-Saxon graves, shields are often placed directly over the chest, a final gesture of warrior identity.

With the arrival of the Normans in the 11th century, shield design evolved. The kite-shaped shield, longer and tapering to a point at the bottom, became standard among Norman cavalry. This form offered greater protection for mounted warriors, covering the leg and side while allowing for flexible use of the lance and sword. The famous Bayeux Tapestry provides a visual record of such gear, depicting both Normans and Anglo-Saxons in the 1066 conflict—one with kite shields and chainmail hauberks, the other with round shields and often less standardized armor.

Spearheads were the primary weapon for most Anglo-Saxon warriors, valued for their reach, versatility, and ease of manufacture. Spears could be used for thrusting in close combat or thrown in the early moments of battle. Anglo-Saxon spears varied widely: some had narrow, leaf-shaped blades ideal for piercing; others were broader, with winged lugs near the base, perhaps used to hook shields or parry blows. Spearheads were socketed onto wooden shafts, typically ash, and often riveted or bound with bronze or iron fittings. Some carried inscriptions or decorative elements, elevating them beyond the merely functional.

Among the Normans, spears evolved into lances, optimized for mounted shock attacks. The elite warrior's equipment—helmet, kite shield, lance, and mail—formed a coherent system designed for mobility and offense. Mail armor, though used by some Anglo-Saxon thegns, became more standard after the Conquest. The famed Norman nasal helm, depicted so often in contemporary art, with its conical shape and prominent nose guard, offered effective protection and clear identification on the battlefield.

Whether buried in warrior graves, pulled from riverbeds, or found on ancient battlefields, this gear tells the story of a militarized society where war was both duty and destiny. The craftsmanship reveals both practical knowledge and symbolic resonance: the boar crest on a

helmet, the knotwork on a spear shaft, the painted surface of a shield were all messages, codes understood by those who fought and bled beneath them.

They are remnants of a world in which the clash of steel was bound to land, law, loyalty, and lineage—where the equipment of battle was as much a part of a man's honor as his word or bloodline.

## Writing Tablets: Traces of Ancient Minds

### Russian finds

#### **Birchbark letters from Novgorod (11th–15th c): Unique medieval literacy record, personal messages, contracts**

In the damp, stratified soil beneath the ancient streets of Novgorod, one of Russia's oldest and most literate cities, archaeologists have uncovered something as fragile as it is extraordinary—birchbark letters, or *berestyanye gramoty*. These humble sheets of bark, inscribed with sharp styluses by merchants, clerks, and even children, have survived for centuries thanks to Novgorod's unique preservation conditions. Dating from the 11th to the 15th centuries, these texts offer an unparalleled glimpse into the minds of medieval people—not rulers or chroniclers, but ordinary citizens speaking in urgent, practical, and sometimes deeply personal tones.

First discovered in 1951, birchbark letters have since been found in the thousands, layered in waterlogged cultural deposits that protect the bark from decay. Unlike parchment or vellum reserved for religious or state use, birchbark was a common writing material—readily available, inexpensive, and practical for short-term notes. The texts were scratched, not inked, making them less about durability and more about immediacy. Yet despite their casual use, they have endured.

The messages vary widely in form and purpose. Some are business contracts and inventory lists, laying out debts, prices, and trade arrangements. In one letter, a merchant named Mikula writes to his partner with careful instructions on handling goods in a distant village—proof not only of active commerce, but of a reliable communication system between towns and hinterlands. Others are legal statements, pledges of service, or land agreements, sometimes signed with crosses or monograms rather than names, indicating the mixed literacy of the time.

But the most haunting and human are the personal letters. In one, a woman named Anna writes with frustration to her husband, demanding he stop drinking and come home. In another, a young servant begs to be rescued from a cruel master. These are not polished compositions—they are raw, conversational, real. They reveal not just language, but emotion, intimacy, anxiety. Some contain spelling errors, misalignments, or corrections scratched above the line, suggesting the rapid, spontaneous act of writing.

Perhaps most moving are the children's exercises. Several birchbark pieces feature repeated letters, phrases, or simple words—evidence of schooling and literacy among the young, even in a society often assumed to be limited in its access to education. One small sheet includes the name “Onfim,” likely a boy of about seven or eight, who drew himself as a knight beside alphabet practice lines. His letters are careful but wobbly, and his doodles include animals, warriors, and fantasy creatures. Through him, the distant past becomes vividly alive—a child at play, practicing letters in a forest city nearly a thousand years ago.

The language used in the birchbark letters is also remarkable. Unlike the high literary Church Slavonic used in formal religious texts, the birchbark letters preserve a form of Old Novgorodian dialect, reflecting the everyday vernacular. This has made the letters invaluable for linguists, providing real-world examples of phonetics, grammar, and vocabulary otherwise lost to time. They show language in motion, revealing changes in pronunciation, inflection, and syntax as they happened across centuries.

The very existence of such a corpus in Novgorod speaks volumes about the city's unique character. Unlike many parts of medieval Europe and Russia, Novgorod was a trading republic with a strong mercantile class, high rates of urban literacy, and a vibrant culture of written communication. Its citizens used writing not as an elite tool but as a practical necessity. Contracts were scratched into birchbark and tucked into boots or bags. Love letters were folded and hidden away. Requests, warnings, confessions—all were recorded in the soft, fibrous skin of trees.

In their simplicity, the birchbark letters challenge assumptions about medieval life. They prove that writing was not the exclusive domain of monks and princes. In Novgorod, it was woven into the fabric of life, part of how people argued, planned, mourned, and remembered.

The letters are now preserved in museums, carefully stored and displayed, each one no larger than a modern postcard but dense with human presence. They are the voices of the silent majority—the shopkeepers, apprentices, daughters, debtors, and schoolchildren whose thoughts rarely made it into chronicles or scrolls. Yet through birchbark, their words survived, etched in the texture of a tree, whispered across centuries.

## **Wax tablets from early Rus trade hubs**

In the marketplaces and administrative halls of early medieval Rus', from Novgorod to Smolensk, and along the river routes that bound the Baltic to Byzantium, merchants and scribes recorded the pulses of commerce and law not just on parchment or bark, but in the smooth, reusable surface of wax tablets. These writing instruments—simple wooden frames filled with dark beeswax—served as practical, portable tools for contracts, inventories, and accounts, offering a durable and erasable medium perfectly suited to a culture in motion.

Although organic in nature and thus rarely preserved in northern climates, fragments and references to wax tablets have been found in excavations and written sources, pointing to their widespread use in early Rus' urban centers during the 10th to 13th centuries. At sites like Staraya Ladoga, Novgorod, and Gnezdovo, where dense trade networks brought together Norse, Slavic, Finnic, and Byzantine communities, archaeologists have uncovered styluses—narrow, pointed tools of bronze, iron, or bone used to scratch letters into wax—and

occasionally pieces of wooden tablet frames. These styluses often feature a flat end opposite the point, used to smooth over mistakes or erase old text, indicating how fluid and revisable such writing was.

The wax tablet was a workhorse of commerce. Unlike birchbark letters, which preserved communication, tablets were often used for temporary recordkeeping—notes to be transferred later into parchment ledgers or oral transactions confirmed and erased once completed. A merchant might carry a small tablet in a pouch to track weights of silver, lists of goods, or the terms of a deal struck on the riverbank. A scribe working for a local official or a prince could record fines, taxes, or legal statements that would later be formalized in ink or relayed to superiors.

These tools were especially useful in bustling, multilingual cities like Novgorod, where daily commerce was brisk and literacy spread among traders, clerks, and craftsmen. The practice likely arrived via Byzantine and Scandinavian channels, where wax tablets had long been common in both secular and ecclesiastical use. Rus' adopted and adapted the model, folding it into its hybrid administrative and legal traditions.

Written sources from the era support this material evidence. Chronicles and charters occasionally reference writing on wax, particularly in legal settings. The *Russkaya Pravda*, the foundational legal code of Kievan Rus', implies that contracts and oaths were often written, stored, and consulted—habits that align closely with the practical use of wax tablets for short-term agreements and in-person dispute resolution. Their portability made them indispensable in a society where traveling tax collectors, trade envoys, and market officials needed to record and revise information on the move.

Though few intact examples survive, reconstructions based on archaeological fragments show tablets typically consisted of two or more hinged wooden panels, each recessed to hold a shallow layer of wax. When closed, the wax was protected from smudging or damage. In some cases, sets of tablets were bound together into multi-page notebooks, allowing more complex records to be maintained. The wax was usually tinted black or dark brown, contrasting with the pale scratch of the stylus point to enhance legibility.

Stylistically, early Rus' tablets were plain and utilitarian, but among the elite or within monastic contexts, more refined examples likely existed—perhaps decorated with carved borders or fitted with metal clasps. A princely household or monastery would have had access to high-quality tablets for administrative and educational use, and perhaps even for the practice of religious copying and note-taking before final drafts were made on parchment.

Together, the material evidence and surviving references to wax tablet use in early Rus' reveal a culture of practical literacy, rooted in commerce, law, and mobility. While birchbark letters give us the voices of the people, wax tablets offer a glimpse into the daily machinery of governance and trade, the ephemeral world of numbers and agreements that shaped the flow of goods and power.

Though most of these records were never meant to last, their impression remains—traced not in wax but in the tools, habits, and scattered fragments that have survived. In their silence, they tell us of transactions whispered and scratched, counted and erased, all in service of a society negotiating its place between forest and steppe, north and south, barter and empire.

## **Roman wax tablets from Vindolanda (Britain): Military orders, grocery lists, birthday invitations**

On the windswept frontier of Roman Britain, beneath the crumbling turf and stone of Vindolanda, just south of where Hadrian's Wall would soon rise, archaeologists uncovered one of the most intimate caches of Roman writing ever found. Hidden beneath the mud and preserved by oxygen-poor soils, the wax tablets and ink-written wooden leaf tablets of Vindolanda emerged in the late 20th century as fragile yet vivid records of daily life. Dating from the late 1st to early 2nd century CE, they offer a remarkably personal glimpse into the workings of a Roman fort—military orders, shopping lists, duty rosters, requests for supplies, and even a birthday invitation, all recorded in the crisp Latin hand of soldiers, scribes, and civilians on the furthest edge of Roman civilization.

Though most of the surviving tablets were written in ink on thin wooden leaves, many originally carried a layer of dark wax, into which messages were scratched with a stylus. The wax has rarely survived, but the writing underneath—the pressure marks on the wood—remained, allowing scholars to reconstruct hundreds of texts. These were the everyday documents of a living community, not grand decrees but scraps of bureaucracy, fragments of domestic concern, and moments of private exchange.

One of the most famous finds is the birthday invitation of Claudia Severa, the wife of a commanding officer at a nearby fort, inviting her friend Sulpicia Lepidina to her celebration. Written partly in the hand of a scribe and signed in her own practiced script, it reads: *"I shall expect you, sister. Farewell, sister, my dearest soul, as I hope to prosper."* This is the earliest known handwritten Latin text by a woman, and in its warmth and informality, it humanizes the Roman world like few other documents can. The fact that such a letter would have traveled between households on the edge of the empire shows not only personal connection, but a network of social and literate women living alongside the military.

Other tablets record the logistics of army life: the distribution of grain, beer, hides, and nails; the state of supply lines; requests for new boots or tunics. One officer complains that he has only received "ten blades when I need twenty," another reports the punishment of an undisciplined soldier. There are military orders, sent from one unit to another, and guard duty rosters listing which century of soldiers is to patrol which section of the fort wall—evidence of the daily machinery that kept the Roman military running.

But these records extend beyond the strictly martial. There are shopping lists, noting the purchase of herbs, lentils, honey, and olive oil. One tablet mentions writing tablets themselves, indicating that such items were part of normal supply and commerce. Personal letters refer to missing family members, gossip among soldiers, or requests for money. Even insults appear—one tablet possibly includes a complaint about a centurion's laziness or arrogance, offering a glimpse of the grumbling, joking tone so familiar in any tightly packed community.

The Vindolanda tablets reflect a world that was at once rigidly structured and entirely human. The Latin is often colloquial, unpolished, and filled with abbreviations or phonetic spellings, revealing how language was lived rather than idealized. Many of the writers were not Roman citizens by birth—they were auxiliary soldiers, local Britons, or foreign recruits—but their Latin was competent and functional. The literacy displayed here was not elite but pragmatic, learned in the service of survival and structure.

The use of wax tablets, particularly in conjunction with styluses and writing kits found in the same layers, underscores the role of reusable writing surfaces in Roman administration. Orders could be drafted, amended, and erased. A centurion might jot down a duty assignment, then smooth it over and re-use the wax once the order was executed. Some tablets were folded and tied, then delivered like letters. Others may have served as temporary ledgers or daybooks, meant to be copied later into more permanent form.

Together, these tablets provide not only data, but a narrative of daily Roman life, told not by generals or poets, but by ordinary hands making do in cold weather, arguing about provisions, planning dinners, writing to friends. They collapse the distance between past and present in a way few archaeological finds can.

They remind us that the empire did not run only on legions and laws, but on notes scribbled in wax, sent across muddy courtyards and passed from hand to hand—little messages that, against all odds, found a way to be heard two thousand years later.

### **Cuneiform tablets (Iraq): Law codes, school exercises, trade records from Mesopotamia**

In the sunbaked soil of ancient Iraq, where the Tigris and Euphrates once shaped city-states into the first recognizable civilizations, writing began not with poetry or myth, but with numbers and trade. The earliest surviving cuneiform tablets—some over five thousand years old—are small, clay rectangles incised with wedge-shaped marks that would become the foundation of recorded history. These tablets, hardened by time or fire, preserve laws, contracts, school lessons, tax records, royal decrees, and even scribbled classroom exercises, offering a direct and enduring link to the minds that shaped the ancient Mesopotamian world.

Developed around 3200 BCE in the city of Uruk, cuneiform was first used by the Sumerians to manage grain, livestock, and temple offerings. Styluses made from reed were pressed into damp clay in systematic strokes—triangular and linear marks whose patterns evolved into a complete script. By the time of the Akkadian, Babylonian, and Assyrian empires, this script could convey everything from bureaucratic tallies to philosophical discourse. The cuneiform tablet was the central medium of governance, economy, and education, and it was produced in staggering quantities.

In the ruins of cities such as Ur, Nippur, Babylon, Nineveh, and Sippar, archaeologists have unearthed entire archives of tablets. Some were stored in shelves or baskets in administrative buildings or temple complexes. Others were hidden away in homes, buried for safekeeping, or lost during conquests. The famed library of Ashurbanipal at Nineveh held thousands of tablets—texts ranging from treaties and omens to medical recipes and epics—systematically catalogued for royal and scholarly use.

Among the most historically significant cuneiform texts is the Code of Hammurabi, carved onto a stone stele but also copied on clay. Dating to the 18th century BCE, it is one of the world's earliest known law codes. Its clauses address a broad range of social, economic, and moral issues: inheritance, trade, marriage, theft, injury, and punishment. Though famous for its severity—"an eye for an eye"—the code also reflects a sophisticated society concerned with hierarchy, justice, and legal standardization. Copies of such laws were distributed to

towns across the kingdom, where scribes used tablets to update local rulings or document court proceedings.

Cuneiform tablets also served the humbler, practical functions of trade and bureaucracy. Merchants used them to record loans, deliveries, agreements, and partnerships. In one tablet from the city of Mari, a trader notes the quantities of wool and silver exchanged for copper ingots. Another from Ur details the rations allocated to temple laborers, listing barley, beer, and oil by weight. These were the original spreadsheets—compact, durable, and often sealed in clay envelopes stamped with cylinder seals to ensure authenticity.

Education in Mesopotamia left its mark in thousands of school tablets, especially from scribal centers like Nippur. Students trained by copying proverbs, lexical lists, and hymns, often on small clay tablets known as exercise pieces. Many of these include mistakes, corrections, and the slow progress of handwriting improvement, capturing the frustrations and ambitions of ancient schoolchildren. One tablet features a teacher's note chastising a student for inattentiveness; another contains the standard drill: *"The scribe's apprentice, his mouth is silent, but his hand speaks."*

Scribes were not only literate but prestigious, trained in Sumerian and Akkadian, mathematics, and astronomy. Their tablets reveal the intellectual infrastructure of early civilization—how knowledge was preserved, transmitted, and institutionalized. From tax ledgers to star charts, they filled every niche of Mesopotamian society. In some cases, scribes personalized their work, adding names, signatures, or pious dedications. These tablets were not anonymous bureaucracy—they were the voices of individuals within a meticulously recorded world.

Some cuneiform texts also reached into the spiritual and mythic, such as the *Epic of Gilgamesh*, inscribed on multiple tablets and discovered in Ashurbanipal's library. Others provided guides to omens, sacrificial rituals, or astrological predictions. Even death was managed through cuneiform: contracts for burial plots, funeral expenses, and prayers for the dead were all recorded on clay.

Each tablet, whether elegant or crude, wide as a book or small enough to fit in a palm, was a unit of preserved thought. Hardened by time, they outlived palaces, temples, and empires. Today, held in museum collections from Baghdad to Berlin, they continue to whisper of contracts agreed, crops tallied, students scolded, and kings who sought to govern through written order.

### **Egyptian ostraca: Notes and sketches from workers building tombs at Deir el-Medina**

On the arid western bank of the Nile, tucked behind the cliffs opposite Thebes, lies the once-secluded village of Deir el-Medina—a place unlike any other in ancient Egypt. This small, walled settlement housed the artisans, scribes, and craftsmen who built and decorated the royal tombs in the Valley of the Kings. These were not pharaohs or high priests, but working families entrusted with some of Egypt's most sacred duties. And they left behind a legacy not in stone, but in the fragments of their daily lives—thousands of ostraca, or inscribed pottery shards and limestone flakes, covered in hurried notes, careful calculations, and vivid drawings.



Unlike formal hieroglyphic inscriptions carved into monuments or composed on papyrus scrolls, ostraca from Deir el-Medina reveal a world of practical, informal, and deeply human writing. They served as notepads, accounting slips, sketch surfaces, and rough drafts. Ostraca were plentiful and cheap—shards of broken amphorae or flakes of limestone were collected and reused, a democratized canvas for communication in a literate and administratively complex society.

Some ostraca contain work schedules and absentee records. Scribes would note which artisans were present, who was sick, who had left to attend a funeral, or who was excused to care for a sick relative. These records are meticulous and sometimes tinged with personality. One entry, written in cursive hieratic script, simply reads: “*Gone drinking with Khonsu.*” Others list ration distributions, tools issued, or temple offerings. These everyday texts reveal a highly organized workforce, regulated by both temple and state, but with moments of humor and humanity breaking through the bureaucracy.

Beyond administration, the ostraca also capture personal letters and informal notes between workers and their families. One man asks his wife to prepare extra food for visiting relatives; another sends a reminder to a colleague about an upcoming ritual obligation. These are not royal decrees but the language of real people managing households, friendships, and labor in the shadow of eternity.

Among the most remarkable ostraca are those bearing sketches and drawings, often preliminary drafts for tomb decorations. Artists practiced figures of gods, pharaohs, and sacred animals, refining their technique before painting the final images on tomb walls. Some drawings are masterful—detailed, proportionally precise, and clearly part of a formal training process. Others are playful or even subversive: cats playing musical instruments, animals in human roles, or exaggerated caricatures of scribes and supervisors. These humorous sketches suggest a community that, while engaged in divine labor, also allowed space for irony, satire, and creativity.

The ostraca also reflect the religious devotion of the community. Many contain hymns, invocations to deities, or copied passages from funerary texts like the *Book of the Dead*. These were likely practice texts for scribes in training, but they also hint at the spiritual rhythms of life in Deir el-Medina. Living so close to the tombs, the workers were steeped in ritual and belief, and their ostraca often blur the lines between the sacred and the mundane.

What makes this body of material so valuable is the sheer volume and range of voices it preserves. While formal inscriptions throughout Egypt glorify kings and gods, the ostraca of Deir el-Medina record the lives of masons, painters, foremen, and their families. Through them, we glimpse a world that was literate, organized, and deeply expressive. They show that writing in ancient Egypt was not limited to elite scribes in temple archives—it was a living, breathing practice embedded in daily life.

These broken shards, cast aside and repurposed, now form one of the richest sources of insight into ancient Egyptian society. They speak of love and labor, of tired hands and watchful gods, of a community bound by stone walls and by the eternal duty of shaping the tombs of kings. They are proof that even in a society where monumentality defined eternity, the small and the fragile could still carry voices across time.

## **Medieval Italian merchant tablets: Florentine and Venetian ledgers and communication**

In the tightly woven alleys of Florence and Venice, where the clang of hammers and the clatter of cart wheels mingled with the measured Latin of contracts and the vibrant hum of vernacular speech, the merchant class of medieval Italy developed one of the most sophisticated written cultures in Europe. Long before the printing press and mass paper circulation, they relied on durable, portable forms of recordkeeping—wooden tablets covered in wax, paper slips bound into ledgers, and parchment notebooks—to run the sprawling networks of trade and credit that reached from Flanders to the Levant. These were the writing tools of capitalism in its infancy, where ink and wax traced the flow of silk, wool, spices, and silver.

In cities like Florence, where banking houses like the Medici, Bardi, and Peruzzi operated, clerks used wax tablets for rapid notation, calculations, and the drafting of agreements before committing them to formal ledgers. These tablets—plain wooden boards with shallow wax surfaces—were used to jot down exchange rates, cargo lists, credit tallies, and notes for letters or account entries. Erasable and reusable, they allowed for agile recordkeeping in a fast-paced economic world. Styluses found in Florentine archives suggest these tablets were a staple tool, carried by agents and scribes alongside their moneybags and shipping seals.

But most of what survives today are not the tablets themselves—wax rarely endures—but the records born from them: bound ledgers and correspondence, often copied from tablet notes into more permanent form. Florentine and Venetian merchant families maintained elaborate books in both Latin and the local Tuscan or Venetian dialects. These documents include double-entry bookkeeping—a revolutionary system that emerged in the 13th century—listing debits and credits, client debts, and rolling balances in meticulous columns. One page might track a consignment of wool cloth to Bruges; another might record interest owed by a Genoese partner.

Venice, with its powerful maritime empire, generated an enormous body of merchant communication, much of it copied from or supplemented by temporary tablet notes. Merchants and sea captains wrote letters describing the condition of ships, cargo losses, political instability in distant ports, or the reliability of brokers. These communications often followed set formats—formal greetings, concise information exchange, and signs of continuing trust—before being summarized in household or company archives.

Some records include coded language or shorthand symbols, understandable only within a family or company, to protect sensitive information. Others mention the use of messengers and runners, boys paid to carry tablets or memorized messages across town or to nearby ports, reflecting a world where trust and speed were essential commodities.

The writing culture that surrounded these tablets was supported by specialized education. In Florence, boys destined for commerce were taught not only reading and writing, but reckoning, calculation with Roman and Arabic numerals, and even penmanship suited to business communication. Merchant schools taught practical Latin for contracts and a polished vernacular for correspondence. Many students practiced on tablets before progressing to paper, and the surviving schoolbooks echo the structure of earlier wax note-taking—short entries, copy phrases, numeric drills.

More than just accounting tools, these writing surfaces bore the mental maps of an emerging global class. A tablet might briefly hold the value of pepper in Alexandria, the name of a risky debtor in Lyon, or a margin calculation for shipping alum to London. Though transient, the information passed through these surfaces shaped decisions, fortunes, and entire commercial legacies.

The transition from wax to paper was gradual but transformative. As paper became cheaper and more widespread by the 14th century, many merchant families began preserving even their draft notes and correspondence in permanent form. Yet the influence of the wax tablet persisted, reflected in the structure of ledgers—narrow columns, abbreviated terms, and flexible entries that echo the ephemeral clarity once etched into wax.

In these tablets and the records they spawned, we find not only the arithmetic of trade but the emotional texture of risk, trust, ambition, and failure. A merchant's mind was as much shaped by what he carried in his head and heart as by what he scratched into wax. And it is in these fragile traces of business and belief that we glimpse the earliest contours of modern finance, drawn not with grand proclamations, but with quick calculations and thoughtful, erasable lines.

### **Early Islamic legal and administrative tablets: Record-keeping in Umayyad and Abbasid courts**

In the bustling courts of Damascus, Baghdad, and other centers of early Islamic administration, where newly conquered territories were stitched together into a vast and complex empire, the written word became an indispensable tool for governance. While the Qur'an was transmitted on parchment and later paper, the machinery of empire—its taxes, edicts, contracts, and daily affairs—often passed through more practical, reusable surfaces. Among them were writing tablets, used in the Umayyad (661–750) and Abbasid (750–1258) periods, particularly in training scribes and recording drafts before final transcription. Though few physical examples survive, literary sources, ink residues, and archaeological parallels make clear the vital role these tools played in one of history's most literate and administratively advanced societies.

In both dynasties, especially under the Abbasids, a professional class of secretaries known as the *kuttāb* emerged—men trained in Arabic grammar, calligraphy, and legal protocol. Before committing texts to parchment or imported paper, scribes frequently used wooden tablets covered in a thin white wash of chalk, gesso, or wax, which could be wiped clean and reused. These tablets, called *lawḥ* in Arabic, varied in size and purpose—from handheld boards for note-taking or copying to larger panels for communal instruction or courtroom summaries.

Such writing surfaces were especially important in the *dīwān* system, the bureaucratic apparatus responsible for managing the empire's military payrolls, land taxes, judicial decisions, and correspondence. In the Umayyad capital of Damascus and later in Abbasid Baghdad, scribes used tablets to draft legal contracts, royal decrees (*sijillāt*), and petitions (*riqāʿ*). Many of these documents would be copied into formal archives or sealed with signet rings after review, but the tablet stage allowed for swift drafting, correction, and temporary annotation.

Arabic sources, including al-Jāhiz and Ibn Qutayba, describe how students in madrasas and scholars in legal institutions practiced fiqh (jurisprudence) and Qur'anic exegesis using tablets. Young men learning to draft legal documents—marriage contracts, commercial agreements, debt notices—would begin by imitating model phrases on tablets, internalizing the formal structure of Islamic legal language. Fragments of wooden tablets have been recovered in Egypt and the Arabian Peninsula bearing partially erased script, often from Qur'anic passages or formulaic legal statements, suggesting their dual role in religious and secular instruction.

The Qur'anic tradition itself influenced the reverence and method with which these administrative texts were written. Calligraphy became both an art and a means of precision, and while legal documents aimed for clarity over ornament, the use of tablets allowed scribes to refine phrasing and layout before setting it in ink on lasting material. In regions where papermaking had not yet taken hold, or for routine communications not intended for preservation, tablets remained the most accessible medium.

In provincial courts, especially in North Africa, Khurasan, and al-Andalus, tablets were used by governors and judges to issue daily instructions or keep track of court cases. Some were carried by messengers or assistants, bearing notes for proclamations, lists of names, or draft replies to inquiries from local leaders. When the Abbasids adopted Persian-style administration, combining Sasanian protocols with Arabic script and Islamic legal concepts, the writing tablet continued to serve as the bridge between oral order and formal record.

In legal contexts, qadis (judges) sometimes had scribes write out testimonies, inheritance divisions, and court findings on tablets before transferring them to scrolls or books for permanent storage. Eyewitnesses might sign with a stylus or thumbprint on the board, and the summary would be read aloud before a final version was transcribed, ensuring consensus. The act of writing—not just the written object—was central to the proceedings.

Though the wooden and wax tablets of this era rarely survive, their literary footprint is unmistakable. They appear in biographical dictionaries, legal manuals, and educational treatises, and their structure influenced the eventual layout of Islamic codices and accounting registers. The ephemeral marks scratched into gessoed wood helped shape permanent legal traditions, facilitating a system in which writing became an extension of divine order and human justice.

In the hands of a court secretary, a governor's aide, or a young scholar repeating verses of law, the tablet was more than a convenience—it was a vessel of knowledge in motion, a tool for thinking through the law before enshrining it in ink. And in the bureaucratic sprawl of the caliphates, these fleeting inscriptions underpinned a civilization of letters that governed from Morocco to Central Asia.

## Inscriptions: Words Carved in Stone

### Russian artifacts

#### Tombstone inscriptions from Novgorod, often bilingual in Church Slavonic and Greek

In the graveyards surrounding the churches of medieval Novgorod, nestled within moss-covered walls and birch-shaded courtyards, lie some of the most evocative examples of early Russian stone inscriptions. These tombstones, carved from local sandstone or granite, do more than mark the resting places of the dead—they preserve the rhythms of a transitional society, caught between its Slavic roots and the powerful gravitational pull of Byzantine Christianity. Many of these inscriptions are bilingual, written in both Church Slavonic and Greek, reflecting not only the linguistic diversity of the Novgorodian elite but also the deeply embedded cultural and ecclesiastical connections with Constantinople.

Novgorod, unlike much of the fragmented Rus' world, maintained a distinct political and religious identity well into the high medieval period. It was a merchant republic, a spiritual stronghold, and a place of literacy and record-keeping. The city's monumental inscriptions—especially its funerary stones—offer a unique synthesis of local language and imported sacred vocabulary. On these stones, Orthodox piety mingles with regional memory, and names are cast into stone in the two tongues that defined a world of trade, theology, and identity.

Tombstone inscriptions from the 12th to the 15th century typically begin with traditional Christian phrases, such as *“Here lies the servant of God...”* or *“Memory eternal...”*, often written in Church Slavonic—the sacred literary language of the Slavs, formal and stylized. These phrases are frequently followed or paralleled by shorter lines in Greek, often a single sentence or blessing formula. Sometimes, the Greek served a ceremonial function; other times, it may have been the language of burial rites, a remnant of the early days of conversion when Byzantine priests still served the northern churches.

One such inscription from the St. Sophia Cathedral cemetery records the name of a local deacon, with his title and dates given in Slavonic, followed by a Greek prayer invoking *“Kyrios eleison”*—“Lord, have mercy.” In another case, the grave of a merchant's daughter includes a Slavonic epitaph paired with a brief Greek line likely adapted from funeral liturgy: *“Αἰωνία ἡ μνήμη”*—“Eternal be her memory.” These were not decorations, but expressions of linguistic devotion, showing a city where faith traveled on more than one tongue.

The stones themselves range from simple slabs with incised lines to more ornate markers featuring crosses, rosettes, or church domes, carved in low relief. The scripts vary too: some inscriptions use a clear, upright uncial Church Slavonic script, while others reflect the more angular, cursive tendencies of practical stonecutters. The Greek is sometimes elegant, other times clumsily rendered—suggesting that not all artisans understood what they were carving, copying phrases from model tablets or dictated texts.

These bilingual inscriptions also serve as chronological anchors, often including the date of death not only in the Byzantine liturgical calendar but in local Slavonic notation. They reflect a world where time was measured through feast days, saints' commemorations, and the rhythm of the church year, yet grounded in a cultural landscape shaped by interwoven identities.

In a few exceptional cases, the tombstones include family genealogies, indicating the deceased's lineage, property affiliations, or clerical connections. These were not simply gravemarkers—they were legal and social documents, designed to protect memory and reputation as much as they were to sanctify the dead. The inclusion of Greek in such contexts could enhance a family's prestige, suggesting learnedness or a tie to Byzantine religious authority.

What survives today is fragmentary. Many stones have worn away under centuries of rain and frost. Others were repurposed in later building projects, broken, or buried beneath shifting ground. But those that remain—whether weather-smoothed or freshly unearthed—continue to speak in two voices, layered like the soil they emerge from. They testify to a time when Novgorod stood not only at the northern edge of Byzantium's influence but at the center of its own literary and spiritual blossoming.

The tombstones of Novgorod remind us that in stone, memory endures, but in language, memory is shaped, sung, and carried forward. To read these inscriptions is to hear the voice of a people who believed that life and death could both be narrated—faithfully, beautifully, and in the tongues of their two inheritances.

### **Rune-like graffiti in Northern Russia and Orthodox carvings on monastery walls**

Far from the grand churches of Novgorod and Kiev, in the dense forests and isolated settlements of Northern Russia, the carved word took on a quieter, more cryptic life. On the walls of wooden chapels, rock faces, and even monastery exteriors, archaeologists and epigraphers have found traces of inscriptions that blur the line between sacred devotion and vernacular expression—a blend of Orthodox carvings, folk symbolism, and at times, markings that resemble Norse runes, echoing earlier traditions of the northern frontier.

In this region—stretching from the White Sea coast to the interior lakes and rivers that connected remote monastic settlements—stone was rare but wood and soft rock were plentiful, and so were hands eager to mark them. On the walls of early wooden monasteries like those on Karelia's Valaam Island, or at the Solovetsky Monastery in the White Sea, simple yet deliberate carvings were made by pilgrims, monks, and passing travelers. These were not formal inscriptions with exact dates or names of patrons. Instead, they were improvised and personal, scratched in margins of icon recesses, beside windows, or on entryways where the human hand might linger.

Some of the inscriptions appear in Old Church Slavonic, offering abbreviated prayers: "*Lord, help me,*" or "*Have mercy on thy servant.*" Others include Christian symbols—crosses, fish, stylized Christograms—carved with slow reverence or hasty devotion. Yet alongside these, scholars have noted markings that resemble Norse runes or pseudo-runic glyphs, carved in remote chapels or on rock outcroppings near old trade routes and fishing stations along the Onega and Mezen rivers. These marks raise fascinating questions about the cultural overlap between the Eastern Slavs and lingering Norse-speaking populations who had once moved through these lands as traders, settlers, or raiders.

Most of these "rune-like" symbols are not true Norse runes—they lack linguistic coherence and do not form readable inscriptions—but they carry visual echoes of the runic tradition:

angular lines, staves, branches, and symmetrical forms, carved in deliberate patterns. Some may be folk talismans, protective marks or signatures left by local inhabitants who had retained fragments of pre-Christian or Scandinavian symbolic systems. Others could be decorative stylizations, adopted unconsciously over generations as cultural memories faded but the shape of sacred mark-making persisted.

On the stone foundations of Northern monasteries, such as those at Kirillo-Belozersky Monastery or Spaso-Kamenny, Orthodox inscriptions begin to appear more clearly from the 14th century onward. These include dedications by abbots, dates of construction, and scriptural verses, carved in the upright, angular forms of Church Slavonic. Some are placed prominently over doorways or on apsidal walls; others are hidden behind later additions, suggesting that building inscriptions were layered, updated over time by successive generations of monks.

A particularly poignant type of inscription comes from the graffiti of lay pilgrims, who often etched their names and brief prayers into the walls of the holy sites they visited. These are testaments of presence—simple, personal, and without pretense. A man might write, “*Ivan was here in the year of the Lord 6923 [1415 AD]*,” while others scrawled crosses beside names, requests for intercession, or even quiet laments. These were not meant for public reading. They were between the writer and God, written into the very bones of the holy place.

Taken together, these inscriptions and graffiti form a layered palimpsest of northern spiritual life—Orthodox and vernacular, sacred and folkloric, intentional and spontaneous. They reveal a population deeply engaged with the act of carving meaning into matter. Whether shaped with a knife, a nail, or a stylus, these marks are the physical residue of memory, journey, faith, and identity.

In these northern inscriptions, words do not shout—they murmur. They do not narrate a grand history; they glimpse the soul of devotion shaped by silence and snow, by long winters and endless forests. They remind us that even the faintest scratch in stone can carry a name across centuries.

## **Roman tomb inscriptions and victory monuments**

In the cities, roadsides, and imperial forums of ancient Rome, inscriptions carved in stone did not merely commemorate the dead or announce the deeds of emperors—they defined the Roman worldview, where identity, honor, and permanence were etched for all to see. From the humble epitaph of a freed slave to the towering proclamations of emperors on victory arches, Roman stone inscriptions were a public and performative language, binding individuals to the collective memory of the state and the cosmos.

The Roman tomb inscription, or epitaph, was one of the most personal yet formulaic of Roman texts. Found across the empire—from the catacombs of Rome to provincial cemeteries in Gaul, North Africa, and Britannia—these epitaphs followed a recognizable structure. They typically began with the letters D.M., short for *Dis Manibus*—“to the spirits of the dead”—followed by the name of the deceased, their social status or occupation, and a brief message. Many include expressions of love or grief: “*She lived 22 years, 6 months, 8*

*days. A faithful wife.*” Others are blunt and bureaucratic: “*Marcus Tullius, freedman of Marcus, shoemaker.*”

Even in their brevity, these inscriptions offer vivid glimpses into Roman society. They reflect a highly stratified culture, where status was carefully recorded—whether one was a citizen, a freedman, or a slave. Inscriptions might mention guilds, military units, or religious roles, and occasionally reveal personal achievements, such as a centurion’s service years or a scribe’s devotion to the Muses. In many cases, the living commissioned their own epitaphs while still alive, ensuring that their public memory conformed to the ideals of Roman dignity and virtue.

But where tombstones whispered the quiet achievements of individuals, triumphal monuments shouted imperial power. The most iconic example is the Arch of Titus, erected in 81 CE by Emperor Domitian to honor his brother Titus and the Flavian victory in the Jewish War, particularly the siege of Jerusalem. The arch, still standing at the entrance to the Roman Forum, carries a prominent inscription: “*The Senate and the People of Rome (SPQR) to the divine Titus Vespasianus Augustus, son of the divine Vespasian.*” These few lines elevate Titus not just as a general, but as a god among gods, embedding him in both celestial and civic frameworks.

The sculpted panels beneath the inscription bring the words to life: Roman soldiers carrying the spoils from the Jerusalem Temple—the Menorah, the sacred trumpets, the showbread table—parade through the archway in a stone narrative of conquest and ritual humiliation. Though the text itself is brief, it is contextualized by the visual language of domination, intended to be seen and remembered by every Roman who passed beneath it.

Similar inscriptions crown other imperial arches, temples, and columns. The Column of Trajan, for instance, bears an inscription that celebrates the emperor’s conquest of Dacia and the construction of the column itself. Though concise, the inscription is paired with a continuous spiral frieze of over 150 scenes from Trajan’s campaigns, transforming the stone into a scroll of military glory. Here, the inscription serves not as a standalone text, but as a title for the unfolding epic beneath it, summarizing a life in command through the formal clarity of carved Latin.

Roman inscriptions were not limited to urban spaces. Milestones along roads, dedication plaques on aqueducts, temple altars, and even graffiti in gladiator barracks all carried messages in stone. Each reflected Rome’s obsession with naming, recording, and declaring, an empire built not only on legions and laws, but on the written word set into enduring material.

The beauty of these inscriptions lies not just in their wording, but in their intent. They were meant to be read, aloud or in silence, by passerby and pilgrim alike. They were monuments of memory, but also tools of ideology—reminding every citizen and subject who held power, what virtue meant, and how life, when framed properly, could approach eternity.

In Rome, writing was never just on the page. It was on the wall, on the column, on the gate—and in the tomb—a civilization inscribed with its own legacy, word by word, stone by stone.



## Viking runestones in Sweden and Denmark: Family records and mythic references

Scattered across the meadows, churchyards, and ancient roadsides of Sweden and Denmark, hundreds of towering stones still stand, carved with long-dead names, interwoven beasts, and curving rows of runes. These are the Viking runestones—memorials raised not in grand halls but in the open landscape, where wind and weather have whispered over them for a thousand years. They served as family records, status markers, and at times, vessels of mythic invocation, anchoring the memory of the living to the power of the past.

Most runestones date from the late Viking Age, roughly the 10th and 11th centuries, just as Scandinavia was transitioning from paganism to Christianity. The majority were carved in the younger futhark, a reduced 16-character runic alphabet suited to the phonetics of Old Norse. Though their forms vary—tall granite slabs, squat boulders, or ring-shaped monuments—their content is surprisingly consistent: memorials erected by the living in honor of the dead, declaring lineage, achievements, and sometimes, a touch of the supernatural.

A typical Swedish runestone might read: *“Thorstein raised this stone in memory of his brother Erik, a brave man who sailed to the east and died in service to the emperor.”* Such stones were often placed along travel routes or near gathering places, meant to be seen and read by passersby. They conveyed not only grief, but social continuity and land claims. To inscribe a stone was to mark territory in both the physical and the genealogical sense—a public declaration of who one was, and whose blood ran through one’s veins.

In Denmark, the most famous example is the Jelling Stone, raised by King Harald Bluetooth around 965 CE. Its inscription proclaims that Harald “won all of Denmark and Norway and made the Danes Christian,” a fusion of royal propaganda, religious transformation, and enduring memory. The stone’s art—a Christ figure intertwined with runic script and animal motifs—reflects a society on the cusp between worlds. This is not just a tomb marker; it is a national monument, announcing faith, power, and dynasty in one stroke.

But not all runestones were about kings and conquests. Many were personal, intimate. A daughter commemorates her mother, calling her “kind and wise.” A group of brothers honors their father, who “died in the west” during a raid or as part of a mercenary band. Some include mythic references, calling upon Thor to hallow the stone or invoking fate (*wyrd*) to explain a death at sea. These touches of the mythic remind us that even as Christianity spread, older cosmologies lingered. The runestone, in its curving form and chiseled words, could channel both the gods of Asgard and the Lord of Heaven, depending on the carver’s creed.

The artistry of the stones varies—from stark lines of runes arranged in vertical bands, to ornate “serpent” designs, where inscriptions curl through the bodies of stylized beasts in looping, ribbon-like forms. Some feature mask faces, dragons, or interlace patterns akin to those in metalwork or manuscript illumination. These were not hastily made—they were commissioned and carved by professionals, known as *rúnaristar* (rune carvers), whose signatures occasionally appear: “Fot carved these runes.”

The runestones also preserve dialect and wordplay, offering crucial insights into the Old Norse language, names, and poetic phrasing. Some are in prose; others use alliterative verse or kennings—the metaphor-rich language of skaldic poetry. A warrior is “tree of battle,” a

sea is “whale-road,” and a ship becomes a “steed of the waves.” These turns of phrase, though brief, link the inscriptions to the oral storytelling tradition that dominated Viking culture.

Many stones now stand in museum courtyards or reconstructed along roads once forgotten. Yet hundreds remain where they were first raised, still legible, still solid. They are not grave markers in the modern sense, for Viking burial mounds were often unmarked. Rather, they are public texts—epitaphs for the land and the family, carved in stone to endure long after the voices that spoke them had faded.

To read a Viking runestone today is to reach across a millennium and hear someone say: “*This was our kin. Remember him.*” And so we do—stone by stone, rune by rune, in the language of ships and swords, of sagas and silence.

### **Greek temple dedications (Delphi, Athens): Insight into city-state rivalries**

On the sunlit slopes of Mount Parnassus, where pilgrims climbed to consult the oracle at Delphi, and within the marble sanctuaries of Athens, where gods and citizens shared sacred space, inscriptions carved into stone revealed more than devotion—they were declarations of power, prestige, and political competition. The Greeks, masters of public memory, inscribed their temples, treasuries, and altars with dedications that celebrated both divine favor and civic rivalry. These inscriptions, many still legible after two millennia, offer direct insight into the competitive spirit that shaped the Greek city-states, or poleis, each striving not just to honor the gods but to outshine their neighbors.

At Delphi, the site of the Sanctuary of Apollo, temple dedications from dozens of cities lined the Sacred Way like a stone résumé of military victories and political influence. After the Persian Wars, for example, the Athenians dedicated a bronze serpent column (now relocated to Constantinople), while the Spartans commissioned an inscription and a column to commemorate their role in the defeat of Xerxes’ forces. The text of the Spartan dedication reads plainly but triumphantly: “*The Lacedaemonians and their allies set this up after defeating the Persians at Plataea.*” Just a few feet away, the Athenians’ own inscriptions quietly contested that version of history with offerings of their own, including weapons taken from the enemy and engraved accounts of naval triumphs.

These dedications were not anonymous pieties—they were political theatre, engraved in Doric or Attic script, often on gleaming white marble. Some named generals, others entire citizen assemblies. City-states competed not only in military strength but in architectural generosity. The Treasury of the Siphnians at Delphi, for instance, dazzled visitors with its friezes and inscriptions boasting of the island’s prosperity. The Athenians, flush with wealth from their silver mines and maritime empire, built a treasury too, its walls engraved with dedications of spoils taken from Persian ships and cities, turning victory into permanent record.

In Athens itself, inscriptions on temples such as the Parthenon, the Hephaisteion, and the Temple of Athena Nike reflect both civic religion and state pride. Beneath the grand sculptures of gods and battles, one often finds inscribed inventories of dedications—lists of golden offerings, votive statues, and armor gifted by citizens or generals. These were

carefully maintained by temple treasurers and carved for posterity, a blend of religious devotion and public accounting. One surviving list from the Parthenon, dating to the late 5th century BCE, names donors, the weight of gold deposited, and the origin of offerings—some local, others brought back from foreign wars.

The practice of inscribing dedications extended to foreign relations and alliances. Treaties, decrees of thanks to other poleis, and honorary inscriptions to visiting dignitaries were set up in temples and agoras alike. Inscriptions found in Athens and Delos honor citizens of Rhodes, Chios, or Corinth for their services to the Athenian people. These were more than polite gestures—they were stone-bound diplomacy, meant to be seen by both gods and visitors as testaments to alliances, benefactions, or subordinate tribute.

Some temple inscriptions were poetic, composed in hexameter or elegiac couplets, drawing on Homeric language to blend praise and piety. Others were terse and factual, listing numbers, weights, and names in the dry language of civic duty. Both types reflect a culture where words carved in stone carried legal, spiritual, and political force. To dedicate an offering in a major sanctuary was to assert one's place in the network of Hellenic power.

Even individuals participated in this economy of remembrance. Athletes who won at the Pythian or Olympic games might dedicate their prizes to Apollo or Zeus, their names immortalized on pillars or statue bases. Wealthy families built small shrines or inscribed columns with personal prayers and thanks. But always, these gestures were public. In the Greek world, piety and prestige walked hand in hand, and the gods themselves were thought to favor those whose cities made the most impressive show of gratitude.

Today, these temple inscriptions remain a vital record—not just of faith, but of the intense competitive energy that fueled Greek city-states. They reveal a civilization where the divine was honored with the same care and strategy as war and politics, and where stone bore witness not only to prayers, but to the ever-turning wheel of civic ambition.

### **Arabic inscriptions on mosques and palaces: Quranic verses in Kufic and Naskh scripts**

Across the domes, minarets, and gateways of the Islamic world, from the faded desert walls of North Africa to the marble courtyards of Andalusia and Persia, a language flows—not spoken, but carved. These are the Arabic inscriptions that adorn mosques and palaces, Qur'anic verses, names of rulers, invocations of divine unity, and spiritual affirmations—script turned into ornament, faith into architecture. From the early days of Islam, these inscriptions served not only as decoration but as a theological, aesthetic, and political expression, uniting word and structure in a uniquely powerful way.

The two most prominent scripts used for these inscriptions are Kufic and Naskh. Kufic, the earlier of the two, is angular, monumental, and formal—perfectly suited to stone and stucco. Its bold verticals and horizontal precision made it the preferred style for the earliest mosque inscriptions. By contrast, Naskh is a fluid, rounded script that emerged later and became favored for manuscripts, but was also adapted for wall inscriptions when grace and lyrical

motion were desired. Together, they shaped a tradition in which text was as central as geometry or material.

In the Umayyad Mosque in Damascus, one of the oldest surviving examples of Islamic monumental architecture, Qur'anic inscriptions run like sacred veins through the structure. Carved in early Kufic, these verses emphasize the oneness of God (*tawhīd*), the mission of the Prophet Muhammad, and the impermanence of worldly power. They are not merely textual reminders—they transform the building into a visual Qur'an, enveloping the worshiper in divine speech.

In Cordoba's Great Mosque, built under the Umayyads of al-Andalus, Kufic inscriptions stretch across the horseshoe arches and mihrab, intertwined with vegetal arabesques and geometric motifs. One of the central inscriptions, drawn from Surah 24 (*An-Nur*), reads: "*Allah is the Light of the heavens and the earth.*" It is not placed randomly—it is set above the mihrab, radiating a symbolic connection between architectural space and divine presence. Here, form and faith merge, and the script becomes a path through which the eye follows spiritual truths.

Palaces, too, carry inscriptions—not only religious, but also political. In the Alhambra in Granada, the walls of the Nasrid palaces are covered in a mixture of Qur'anic verses, royal epithets, and pious invocations. Carved in cursive Naskh and later Maghrebi scripts, these texts proclaim the glory of God alongside praises of the ruler: "*There is no victor but God,*" repeats in tiled rhythm across walls and fountains. Unlike the heavy proclamations of empire in Roman arches, these are whispers of authority, presented with a delicacy that invites contemplation as much as awe.

The Seljuks and later the Mamluks added their own inscriptions to madrassas, mosques, and gates, often combining Qur'anic verses with architectural waqf statements, declaring who built or endowed a building, when, and for what purpose. On the walls of the Mosque of Sultan Hasan in Cairo, for example, carved Naskh inscriptions declare the sanctity of the space, list the date of foundation, and quote Surah al-Fatiha and Ayat al-Kursi, creating an architectural network of devotion and legal record in a single gesture.

In many Islamic traditions, these inscriptions were also meant to protect, sanctify, and elevate a space. The very act of carving divine words into walls was believed to imbue the structure with baraka, or blessing. They served as reminders to the faithful and, in public palaces, as subtle statements of divinely sanctioned rule. When a sultan's court bore Qur'anic verses above its threshold, it wasn't only beauty—it was a message: the ruler reigns under the gaze and judgment of God.

Even the absence of figural representation in much Islamic religious art led to the elevation of calligraphy as the highest artistic form. And nowhere is this more evident than in the monumental inscriptions, where the Qur'anic word becomes geometry, where God's speech is not just heard or read—but seen.

Today, these inscriptions still sing, though some have faded beneath soot, time, or conquest. They are not simply ornamental flourishes—they are the backbone of Islamic visual identity, a constant recitation cast in stone, tile, and stucco, carrying forward a tradition in which the pen, as the Qur'an says, was the very first creation, and the act of writing is a sacred trust.

## Medieval Latin inscriptions on cathedrals and papal buildings in Italy

From the worn thresholds of Rome to the soaring façades of Siena and Florence, the stone walls of medieval Italy's cathedrals and papal palaces bear the echo of Latin—not only as a sacred tongue, but as the enduring public voice of faith, law, and papal authority. Inscriptions carved into these buildings announce not just dates and donors, but doctrines, indulgences, and power itself. They were meant to be seen, read, and understood by clergy, pilgrims, and citizens alike, transforming churches into stone texts—libraries of belief and memory built for the ages.

During the Middle Ages, Latin remained the language of the Church, of scholarship, and of official proclamation. While the spoken language of the people shifted toward vernacular Italian dialects, the inscriptions that adorned cathedrals and papal commissions held fast to Latin, using it to elevate architecture into a visible expression of the divine order. A visitor stepping through the doors of a cathedral encountered not just sacred space, but a structured narrative etched into marble and brick.

In Rome, the inscriptions of papal buildings and basilicas are among the most authoritative. Over the entrance to the Lateran Basilica, the cathedral of the pope, is the proclamation: "*Omnium urbis et orbis ecclesiarum mater et caput*"—"Mother and head of all the churches in the city and in the world." This is not modest; it is a statement of ecclesiastical primacy, a theological cornerstone fixed in stone. Such texts often appear above doors or apse arches, framing the experience of the faithful and asserting Rome's central place in Christendom.

Many papal constructions, especially during the Gregorian Reform and Avignon Papacy, carried inscriptions identifying the pope who commissioned the work, the purpose of the building, or the virtue being enshrined. At the Basilica of San Paolo fuori le Mura, a frieze lists the names of all popes from Saint Peter onward, a visual lineage of apostolic succession. Even renovations or restorations were commemorated in Latin plaques, so that each new intervention added another layer to the textual body of the Church.

In cities like Florence, Pisa, and Siena, the cathedrals also use inscriptions to proclaim founding moments, theological ideals, and civic pride. On the façade of the Duomo in Florence, for example, a Latin dedication commemorates the building's initiation in honor of Santa Maria del Fiore and its association with both papal blessing and Florentine civic independence. In Siena, the cathedral features an inscription linking its construction to the Virgin Mary and to the city's victorious resistance against foreign threats—faith and identity carved in a single line.

Interior inscriptions also abound. In the Baptistery of Pisa, a Latin line circles the octagonal font, reminding all who enter of the sacrament's cleansing power: "*Hic peccatorum maculae tergantur*"—"Here the stains of sin are washed away." Mosaic inscriptions in apses frequently quote the Psalms, Gospels, or Epistles, turning the sanctuary into a visual liturgy. Stone and gold leaf become the pages on which salvation is proclaimed.

Occasionally, these inscriptions reflect the changing tides of theological or political crisis. Some contain appeals for protection during plague, others mark the fulfillment of vows made in wartime. Latin, in such moments, becomes not just the language of doctrine but of

communal hope and memory. And as the language of canon law, Latin also gave legal force to inscriptions identifying privileges, indulgences, or consecrated ground.

The scripts themselves evolved over centuries—from blocky Romanesque capitals to elegant Gothic minuscule—each style reflecting the period’s aesthetic and ecclesiastical climate. In some cases, inscriptions were inlaid with mosaic tesserae or colored marbles; in others, carved deeply into travertine or sandstone, meant to weather centuries.

Though these words may now seem silent to most modern visitors, they once spoke with clarity and conviction, anchoring communities to a common faith and shared past. They are timelines in stone, inscribing not only names and dates but ideas—transcendence, repentance, continuity, and order.

In the cathedrals and papal halls of Italy, Latin inscriptions turned buildings into living sermons, walls into proclamations, and architecture into scripture. Even today, in their shadow, we still read the intention: *that God is here, that this place is holy, and that these words will outlast us all.*

## **Figurines: Small Forms, Big Meaning**

### **Russian finds**

#### **Paleolithic Venus figures from Siberia and Central Russia**

Long before the rise of cities, empires, or writing, humans carved their hopes, fears, and mysteries into small, tactile forms. Among the most enigmatic and widespread of these early creations are the Venus figurines—small statuettes of female forms, found across Ice Age Europe and Asia. In the cold expanses of Siberia and Central Russia, along the ancient banks of the Yenisei and Don rivers, these figures appear in the archaeological record as both art and artifact, their rounded silhouettes carrying meaning that transcends time.

In Paleolithic Russia, these figurines date back as far as 20,000 to 25,000 years ago, associated with the Gravettian and later Epigravettian cultures. Carved from mammoth ivory, soft stone, or fired clay, they often depict women with exaggerated hips, breasts, and abdomens, while minimizing or omitting facial features, limbs, or fine detail. These were not portraits—they were symbols, but of what exactly remains a subject of deep debate.

One of the most striking discoveries came from Mal’ta, near Lake Baikal in southern Siberia, where figurines were unearthed in the 1920s and later studied in greater detail. Unlike their European counterparts, some Mal’ta Venus figures are less abstract and more varied—featuring clothing-like markings, headgear, and incised patterns that hint at textile traditions. Some appear pregnant, others slender; one even has a hole drilled through the top, suggesting it was worn as a pendant or amulet, hanging close to the body.

What makes the Russian Venuses particularly intriguing is their context. At sites like Mal’ta and Buret’, the figurines were found in domestic areas, sometimes near hearths or within

dwelling made of mammoth bone, suggesting they were part of everyday life or ritual practice, not simply grave goods. Their placement implies a continuity of presence—objects of attention, possibly used in rites related to fertility, protection, or identity.

Further west, in Kostenki, on the Don River in Central Russia, Venus figurines made of fired clay and limestone have also been uncovered. One clay figure, dating to approximately 21,000 BCE, is notable not only for its fine proportions but also because it represents one of the earliest known uses of ceramic technology. These were not functional vessels or tools—they were art with a purpose, sculpted and fired in the depths of winter, shaped by hands in a world of firelight and survival.

The consistent emphasis on the female form has inspired a wide range of interpretations. Some scholars argue these figures were fertility symbols, representing the idealized mother or Earth goddess. Others see them as self-representations, created by women themselves, viewed from above and lacking facial detail for a reason. Still others believe they were totemic or protective—kept as charms to ward off danger or ensure the success of a hunt, pregnancy, or season.

Their size—typically no larger than a hand—suggests they were meant to be held, carried, touched. This portability hints at their intimate role in human life, perhaps passed from person to person, or retained across generations. Unlike the monumental cave paintings of Western Europe, these figurines reflect individual interaction with the symbolic world, where memory, magic, and matter fused into small sacred forms.

In their abstraction, the Venus figurines of Russia also challenge modern assumptions. They defy realism but radiate significance. Their curves are not decorative—they are conceptual forms, dense with meaning. Whether they were used in initiation ceremonies, healing rituals, or household worship, they point to a culture where symbolic thinking was already highly developed, and where carving the body meant carving out a space in the cosmos.

These ancient figures, found amid frost and bone, are the earliest expressions of symbolic continuity in the Russian heartland. They carry no written message, no spoken name—but they speak all the same, of the human need to see meaning in the body, to shape the sacred with our hands, and to hold belief in the palm like a flickering coal against the cold.

### **Slavic household god figurines and idol fragments, pre-Christian era**

Before the arrival of Orthodox Christianity in the lands of early Rus', the Slavic peoples of Eastern Europe maintained a vibrant and deeply rooted system of folk belief and animistic worship, where spirits inhabited forests, rivers, and hearths. In this world of natural power and ancestral memory, the divine was not remote—it was local, protective, and often personal. Across forest clearings, river valleys, and scattered settlements from the Dnieper to the Upper Volga, archaeologists have uncovered figurines and idol fragments that bear silent witness to this pre-Christian spiritual life, shaped in clay, wood, and occasionally stone.

These Slavic household god figurines, often just a few inches tall, were kept in dwellings or small domestic shrines. Though many were likely destroyed or hidden during Christianization

campaigns in the 10th and 11th centuries, scattered finds from earlier layers reveal anthropomorphic forms—simplified human shapes with minimal detailing, broad shoulders, and sometimes faint facial markings. Some have raised arms, a posture interpreted as one of invocation or blessing. Others are faceless, with only abstract body outlines, emphasizing presence rather than personhood.

While we cannot assign these figures to named deities with certainty, Slavic tradition preserved through later chronicles and folklore speaks of a host of household spirits and minor gods—among them the Domovoi, a protective ancestral spirit linked to the family hearth; the Mokosh, a goddess associated with women, fertility, and weaving; and Perun, the sky god often imagined as bearded and warlike. Figurines found near hearth sites or woven into ritual layers of clay and bone may represent such beings, though their original names are lost to time.

Many figurines were made of unglazed clay, sometimes hardened in domestic fires, suggesting that they were crafted locally, possibly by the families who kept them. Others are carved from soft wood, though few wooden examples have survived due to decay. In some regions, figurines have been found in ritual pits or beneath thresholds, their placement hinting at protective functions—guardians of the home, the livestock, or the family line.

A few fragments show signs of deliberate breakage, likely part of seasonal or transitional rituals. In some reconstructed examples, arms or heads were broken off and replaced, possibly marking the turning of the agricultural cycle, the death of a family elder, or the passing of one spirit into another. This cyclical approach to material divinity reflects a worldview in which figurines were not sacred in themselves but were vessels for presence, temporary homes for the numinous forces that moved between worlds.

More elaborate idols, possibly of tribal or communal significance, have also been found. A notable example is the fragmentary remains of multi-faced wooden figures, reminiscent of the later idol of Zbruch, found in western Ukraine. Though that particular idol dates to the 9th or 10th century, similar stylistic echoes appear in earlier figurines—tiered bodies, stacked heads, or etched solar patterns—suggesting a visual language shared across vast Slavic territories.

While most of these figurines lack inscriptions, some have been found alongside ritual objects such as miniature wheels (symbolic of the sun), fertility tokens, or bone implements. Their pairing suggests that figurines were used in domestic rites of passage, invoking favor in planting, birth, healing, and the unseen rhythms of rural life. They were tangible companions to prayer, sacrifice, and storytelling, linking each generation to those before through gesture and clay.

The Christianization of Rus' brought a campaign to suppress such artifacts. Many were buried in haste, shattered, or absorbed into syncretic practices, where old spirits were reinterpreted as saints, and figurines hidden away with whispered names. Yet the survival of these forms, even in fragments, reveals the tenacity of belief, the deep need to shape and hold the divine.

In these small figures—often crude, sometimes graceful—we glimpse a world where gods were not distant but present in firelight and threshold, in seasons and sorrow, in the carved contours of a hand-held idol resting in the corner of a wooden house. They are echoes of a



time when belief was made from earth, and power wore the shape of a human body, familiar yet eternal.

### **Cycladic Figurines – Marble Abstraction and the Mystery of the Aegean**

Long before the rise of classical Athens or the myths of Homeric Troy, across the scattered islands of the Cyclades in the Aegean Sea, a quiet and elegant tradition of figurative sculpture flourished. Between 3000 and 2000 BCE, in the heart of the Early Bronze Age, artisans of these islands carved marble figurines—most often female, poised and abstracted, their forms reduced to the essential. Known collectively as Cycladic figurines, they remain some of the most hauntingly modern works of antiquity, combining profound simplicity with an enduring enigma.

Typically less than 30 centimeters tall, though some reach life-size, these figurines were carved from the brilliant white marble that the Cycladic islands themselves provided, particularly from Paros and Naxos. Their features are uniform and stylized: elongated faces with prominent noses, folded arms across the torso, slender legs tapering to delicate feet, and smooth, unbroken surfaces. The heads are tilted slightly back, giving them a silent and elevated presence. Most are female, with abstracted indications of breasts and pubic triangles, while male figures—much rarer—are often shown seated or playing musical instruments.

What strikes the modern viewer is the minimalism. The absence of facial features (save for the nose) and the deliberate reduction of bodily detail give the Cycladic figurines an aesthetic restraint that borders on the modernist. In fact, they deeply influenced 20th-century artists such as Brancusi, Modigliani, and Picasso, who saw in these ancient forms a kind of purity—art that existed beyond language or time.

Yet these figurines were never intended for gallery display. They were ritual objects, found primarily in burials across the Cycladic islands, often laid beside the deceased, nestled with pottery and tools. Their placement suggests an intimate connection to the dead, possibly as guardians, companions, or symbolic representations of fertility and regeneration. Some show signs of repair, others of being intentionally broken before burial—practices that may reflect ritual transformation or release of spiritual power.

Traces of pigment reveal that many of these seemingly austere white figures were once brightly painted. Delicate lines around the eyes, hair, and body were added in blue, red, or black—patterns that may have conveyed status, gender, or identity. These colors have mostly faded, leaving the polished marble behind and giving rise to the misconception of Cycladic art as pure white abstraction.

The function of these figurines remains debated. Were they idols of a goddess—perhaps an early Earth Mother or deity of fertility? Or were they images of the deceased, intended to preserve presence in the afterlife? Some scholars argue for a symbolic role in rites of passage, particularly for women—marking puberty, marriage, or death. Others point to their possible musical or performative significance, given the few examples of figures holding instruments.

What is clear is that the figurines were more than art—they were objects of meaning, passed between generations, handled, perhaps sung to or mourned over, carried into the grave like

memories solidified in stone. Their consistency across the islands speaks to shared beliefs and aesthetics across the Cycladic world, even in the absence of a written language or central authority.

Today, Cycladic figurines are among the most recognizable artifacts of the Aegean Bronze Age, but many also bear a legacy of loss. Over the 20th century, thousands were looted from their burial contexts, sold into private collections, and divorced from the archaeological stories they once held. Though museums now work to preserve and study them properly, their original meanings remain half-hidden, shaped as much by speculation as by evidence.

And yet, in their smooth curves and silent faces, these figurines still speak. They carry a whisper from a vanished island culture, one that viewed the human body not as spectacle but as symbol, distilling form into essence. In their stillness, they offer not explanation but presence, a small marble body holding the eternal question: who were we, and what did we believe?

### **Terracotta Guardians and Givers – Fertility and Protection in Mesopotamian Figurines**

In the cradles of Sumer, Akkad, Babylon, and Assyria, where cuneiform first pressed into clay and ziggurats rose above irrigated fields, the divine was not distant. It stood on shelves, was buried beneath thresholds, and rested in the corners of homes. Across thousands of years, the people of Mesopotamia sculpted countless terracotta figurines—small, human-like forms of fertility goddesses, household spirits, and protective demons. These were not temple idols for public worship; they were personal gods, everyday guardians, and symbols of life's fragile balance. Crafted in mud and fired in village kilns, they connected the cosmic to the domestic.

Many of these figurines were made in simple molds or shaped by hand, some no taller than a palm's width. The most common type are the fertility figures, often nude or semi-clothed female forms with exaggerated breasts, hips, and thighs, holding their hands at the chest or framing their bellies. Found from the Uruk period (c. 3500 BCE) onward, these figures echo a deep continuity of belief: that fertility, both human and agricultural, was the lifeblood of survival. Their repetition over centuries and regions—from Diyala to Mari—suggests a symbolic universality embedded in Mesopotamian daily life.

Some of these terracotta women wear elaborate headdresses or necklaces, indicating they may represent specific deities such as Inanna (later Ishtar)—goddess of love, war, and fecundity. Others are more abstract, with simplified limbs or schematic facial features. They were likely dedicated in domestic altars, used in fertility rites, or offered in temples during festivals. In graves, they appear alongside personal items, suggesting that their power was meant to follow the dead into the afterlife, ensuring fertility and protection beyond the mortal world.

Complementing these nurturing figures were the apotropaic (protective) figurines, many with grotesque or fearsome features. Among the most famous is Pazuzu, the lion-headed, winged demon with a serpentine tail, wide eyes, and outstretched arms. Despite his terrifying appearance, Pazuzu was considered a defender against other demons, especially the female spirit Lamashtu, who threatened pregnant women and infants. Small Pazuzu figures were

buried beneath floors, placed near beds, or worn as amulets, their power activated through ritual incantations.

Other protective figures include the apkallu, wise sages associated with early divine kingship and depicted as human-animal hybrids—often with fish cloaks or eagle heads. These beings appear in miniature statues placed in magical foundation deposits, alongside inscriptions and sacred texts. Their presence was believed to neutralize evil forces and guard sacred or royal architecture.

What binds the fertility and protective figures together is their ritual intimacy. They were not distant objects of collective worship but objects of interaction—held, placed, anointed, and addressed. Their surfaces bear fingerprints, knife marks, and burnishing from hands that believed they held power. Many have holes or loops, showing they were worn or hung, perhaps on walls, in cradles, or on belts. Their craftsmanship ranges from crude village productions to finely modeled temple votives, but all share the same essence: function over grandeur, belief over beauty.

Occasionally, inscriptions accompany these figures, scratched post-firing or written on accompanying tablets. These brief texts identify the figure's purpose—“*For protection of the house*”, or “*To bless the womb*”. Some carry names, either of the deity invoked or the person dedicating the offering, adding a layer of personal devotion that bridges the physical and spiritual world.

Though terracotta was a humble material—easily cracked or lost—it was the perfect medium for the personal divine. Unlike bronze statues or temple idols guarded by priests, these figures belonged to the people. They were part of the rhythm of birth, illness, harvest, and storm, constant reminders of a world shaped by gods, demons, and the fragile hope of renewal.

Today, they lie in museum cases, often anonymous and fragmented, their original meanings faded but not erased. They remind us that the earliest civilizations did not separate religion from daily life—the sacred was held in the hand, fashioned from earth, and placed beside the bed, the oven, or the tomb.

## **Mesoamerican Figurines – Sacred Bodies and Symbolic Power**

Across the ancient cities and ceremonial centers of Mesoamerica, from the humid lowlands of the Olmec heartland to the highland temples of the Maya and Aztecs, people sculpted clay into bodies—miniature yet powerful, stylized yet expressive. These figurines, crafted for ritual, teaching, burial, and magic, carried markings that spoke not merely of beauty but of cosmology, identity, and transformation. In the hands of priests, midwives, traders, and the dead themselves, they formed an essential part of the spiritual economy of pre-Columbian civilizations.

The Olmec, the earliest known major culture in Mesoamerica (c. 1500–400 BCE), produced figurines that are immediately recognizable by their distinctive features—fleshy faces with downturned mouths, almond eyes, and baby-like proportions. Many are made of jadeite, serpentine, or finely polished terracotta, their forms simultaneously human and divine. Some wear headdresses or belts, while others display cleft heads, a trait symbolizing fertility,

maize, or divine lineage. These were not toys—they were icons of myth, images of human beings charged with spiritual potential.

As Olmec influence gave way to other cultures, the Maya (c. 250–900 CE) developed an intricate tradition of ceramic figurines, especially in the Classic Period. Found in both urban and rural contexts, Maya figurines range from elaborate hollow sculptures of nobles, dancers, and gods to solid miniatures of animals, warriors, or captives. Many are adorned with symbolic markings—dots, lines, scarification patterns, and glyphic motifs—which reveal their ritual function. Some figurines were whistles or flutes, meant to be used in ceremonies; others had holes for burning incense, connecting them to smoke offerings and transformation rites.

One Maya figurine from Jaina Island off the Yucatán coast shows a woman holding a child, adorned with shell jewelry and facial tattooing. She is not simply maternal—her posture, costume, and markings suggest a ritual midwife or goddess. Such pieces were often buried with the dead, suggesting they served as companions or protectors in the afterlife, carrying specific roles or prayers into the world beyond.

The Aztecs, who rose to power in central Mexico in the 14th century, also produced a vast array of figurines, many tied to the pantheon of gods, seasonal festivals, and healing rites. Aztec figurines are often more stylized and angular, featuring clay representations of deities like Tlaloc (god of rain), Xochipilli (god of flowers and music), or Cihuateteo (spirits of women who died in childbirth). Some have open mouths, bared teeth, or contorted limbs—expressing not suffering but divine power in transition, caught between earthly and supernatural states.

Aztec figurines were commonly used in household altars or placed in ritual caches, buried beneath buildings or platforms to sanctify space or mark celestial events. Certain figurines were ritually “killed”—deliberately broken during ceremonies to release their spiritual charge. This practice echoed broader Mesoamerican beliefs that objects could be animate, imbued with spirit or essence (called *teotl* in Nahuatl), and needed to be “released” through intentional destruction.

Across Mesoamerica, gender and transformation are key themes in figurine art. Some show individuals in elaborate costumes or masks, blurring human and divine roles—perhaps depicting ceremonial impersonation or mythic metamorphosis. Others appear androgynous, merging male and female attributes, possibly linked to fertility or creation myths. These figures do not depict individuals but roles and forces—rain-bringers, maize-guardians, singers, warriors, mourners.

The widespread appearance of figurines in child burials suggests an additional layer of meaning: these objects could act as substitute companions, helping children navigate the afterlife or representing a family’s ongoing care and protection. In some cases, figurines seem to represent deified ancestors, connecting the living to their spiritual lineage.

Despite their size, Mesoamerican figurines carry tremendous symbolic weight. Their markings are not decorative—they are glyphs of belief, maps of status, and mirrors of myth. They embody a worldview where the human body was not only sacred, but a medium for divine forces to be made visible, manipulated, and remembered.

Today, their silent gestures and stylized expressions still radiate presence. Though pulled from beneath temples, homes, and fields, they have not lost their gravity. They remain small embodiments of enormous ideas—cosmic, cyclical, and rooted in clay.

### **Goddesses of Clay and Earth – Neolithic Figurines from Çatalhöyük**

In the rolling plains of central Anatolia, where wheat now waves over ancient ruins, the Neolithic settlement of Çatalhöyük rises like a buried city of memory. Dating back to around 7500 BCE, this densely built community—one of the oldest known urban centers—has yielded not only the remains of houses, tools, and painted walls, but also a striking collection of goddess figurines, offering some of the earliest tangible evidence of ritual practice and spiritual structure in human history. These small sculptures, formed in clay and bone, suggest that organized religion did not begin with temples, but with hands and households, shaped in the same earth that gave life and food.

The most iconic of these figurines is a seated female figure, generously proportioned, with exaggerated hips, thighs, and breasts, flanked by two felines or leopards. She sits on a throne-like seat, hands resting on her knees, her gaze level and still. Though only about 17 centimeters tall, this so-called “Seated Goddess” commands a presence that transcends size. Her imagery evokes both fertility and dominance, a calm but formidable authority grounded in the cycles of nature.

Dozens of other female figurines found at Çatalhöyük vary in detail—some are slender, others corpulent; some are naked, others draped or marked with incised lines—but they all share a focus on the human form as a vessel of sacred meaning. Many were found buried in household spaces, tucked beneath platforms or walls, suggesting that these objects were not temple idols but part of domestic religious practice, perhaps linked to ancestors, fertility, or seasonal rites. Their presence in multiple homes hints at a shared spiritual tradition woven into everyday life, rather than centralized priestly control.

Unlike later religious art that distinguishes the divine from the human, the figurines of Çatalhöyük blur the line. Some may represent deities—goddess figures embodying earth, birth, and life cycles—but others may have functioned as protective spirits, ancestral icons, or ritual tools. The recurring emphasis on the female body has led many scholars to propose a goddess cult or matrifocal belief system, though this remains debated. What is certain is that the symbolic language of these figures—broad hips, detailed vulvas, pregnant bellies—speaks to a world where creation and survival were sacred, and where female imagery carried cosmic weight.

The context in which these figurines were used offers further clues. Çatalhöyük’s homes were multi-functional spaces, combining sleeping, cooking, and spiritual activities under one roof. Walls were painted with murals of animals, humans, and abstract patterns; burials were placed beneath floors, connecting the living with the dead. Figurines found in these layers suggest that belief and domesticity were inseparable, that ritual was embedded in the very structure of daily life.

Some figures were deliberately broken, possibly during rituals or as part of symbolic “deactivation.” Others were repaired or reburied, showing they were not disposable. They

were handled, reused, reinterpreted. Their surfaces, sometimes burnished, sometimes rough, carry the marks of long use and meaning. They were not museum pieces—they were functional symbols, engaged in cycles of birth, death, fertility, and memory.

Notably, Çatalhöyük lacks large communal shrines or temples. Its spirituality seems to have been horizontal rather than vertical, built into the walls and floors of private life. The goddess figurines, in this context, become portable centers of belief, shaped by individuals but shared by the community. They offer a rare glimpse into a pre-hierarchical spiritual system, one where power did not yet wear crowns or claim divine descent, but where the body, especially the female body, stood as a symbol of continuity, protection, and transformation.

Today, these figurines rest in museum displays behind glass, their clay forms carefully cataloged and debated. But they were once part of a living spiritual vocabulary, passed from hand to hand, placed beside beds and bones, carried in rituals now forgotten. They remain among the earliest known sacred images, not of distant gods, but of the sacred made personal, shaped in the same earth as the food that fed and the children that grew.

### **Shabti Figurines of Egypt – Servants for Eternity**

In the tombs of ancient Egypt, where wall paintings shimmered with scenes of harvests, feasting, and journeys beyond the western horizon, rows of small figurines stood in ordered silence. These were the shabtis—also known as ushabtis or shawabtis—miniature servant statues buried with the dead to ensure a life of comfort and ease in the afterworld. Fashioned from faience, wood, stone, or terracotta, these figures were not mere symbolic offerings. They were magical laborers, bound by spell and belief to serve their master beyond death, and they offer one of the clearest examples of how Egyptian funerary magic merged art with function.

The earliest shabtis appear during the Middle Kingdom, around 2000 BCE, and by the time of the New Kingdom (especially the 18th to 20th dynasties), they had become standard elements in elite burials. Each figure typically took the form of a mummified human, arms crossed over the chest, sometimes holding hoes or grain baskets, tools of agricultural labor. The idea was that if the deceased were called upon in the afterlife to perform manual tasks—such as irrigating fields, building canals, or harvesting grain—the shabti would step forward and reply, *“Here I am.”*

To activate this magical duty, most shabtis were inscribed with a version of Spell 6 from the Book of the Dead, a funerary text that evolved over centuries. The inscription usually reads: *“O shabti, if [name of the deceased] is called upon to do any work in the realm of the dead, such as cultivating the fields, irrigation, or transporting sand from east to west, you shall say: ‘Here I am.’”* In wealthier tombs, dozens or even hundreds of shabtis might be included—enough to create a full workforce for the afterlife.

Shabtis varied widely in material and craftsmanship. The most common were made of blue-green faience, a glazed ceramic that symbolized rebirth and the lushness of the Nile. Others were carved from limestone, sycamore wood, or even precious materials like alabaster or bronze. The wealthiest tombs might include a full *corvée* system, with overseers holding

whips, distinguished by their different attire or position, reinforcing the idea that the afterlife would mirror earthly hierarchy.

Some shabtis are beautifully personalized, with carefully incised hieroglyphs naming the deceased and invoking specific deities. Others are simpler, mass-produced figures with minimal detail, often buried in boxes or compartments within the tomb. Even when hastily made, they were still expected to function ritually, standing ready for eternity's call.

These figures were not merely symbolic comfort—they reflected a society where work was seen as both blessing and burden, and where the elite prepared carefully to avoid labor in the next life. Shabtis also reinforce the Egyptian idea that life continues after death much as it did before, with fields to tend, duties to fulfill, and the need for help from others—even if those helpers were cast in miniature and animated by magic.

Interestingly, shabti use evolved over time. In earlier periods, a single figurine might suffice. By the Third Intermediate Period, tombs could contain one shabti for each day of the year—365 in total—plus 36 overseers, one for each 10-day Egyptian week. These large assemblages became elaborate components of funerary equipment, as essential as the coffin or amulets, and reflected a kind of funerary arms race, where the well-provisioned tomb boasted not just gold and decoration but a full retinue of the dead's loyal workers.

Despite their abundance, each shabti carried intimate meaning. They were not tools, but intercessors, prepared to act in the name of the deceased, to answer the call of Osiris or the field gods, and to ensure that the burdens of eternity would not weigh heavily on the soul. Their faces, sometimes identical, sometimes softly individualized, evoke a curious blend of mass ritual and personal protection.

Today, shabtis fill museum cases by the hundreds. Their forms are often so familiar that we forget their original power. But in their original tombs—stacked neatly in chests, lined along walls, tucked into niches—they stood as an army of care, ready to hoe, carry, and answer with unwavering devotion.

They remind us that for the ancient Egyptians, the afterlife was not an escape, but a continuation, a land where fields still needed tending, but where the wise and the prepared ensured that they would never labor alone.

## **Building Foundations: Traces of Lost Architecture**

### **Russian remains**

#### **Fortifications of Staraya Ladoga and early Kremlin structures**

Before Moscow's towers gleamed with white stone and golden domes, before even Novgorod's cathedral walls bore the echoes of empire, there stood the fortified town of Staraya Ladoga, nestled along the Volkhov River, guarding the waterway between the Baltic Sea and the heart of early Rus'. Known as the "first capital of Russia" by some chroniclers,

Ladoga was more than a trading outpost—it was a militarized gateway, one of the earliest examples of organized defense in East Slavic lands. Its fortifications, built from wood, clay, and eventually stone, are among the earliest architectural traces of state-building and settlement hierarchy in medieval Russia.

Founded in the 8th century and flourishing in the 9th and 10th as part of the Varangian trade route, Staraya Ladoga was ideally positioned at the meeting point of Scandinavian, Finno-Ugric, and Slavic cultures. With merchants and warriors navigating from the Baltic to Byzantium, control over this crossroads demanded protection. The earliest fortifications were timber walls and earthen ramparts, reinforced with wooden towers and ditches. These structures—though long vanished—left behind foundation postholes, scorched earth layers, and outlines of ramparts, visible in the archaeological record.

Later phases of fortification, particularly in the 12th century, saw the construction of stone walls and round towers, using local limestone and sand-clay mortar. These were more permanent, part of a wider transformation of early Rus' towns from tribal settlements to fortified administrative centers. In Ladoga, archaeologists have uncovered tower footings, wall fragments, and gate structures, showing a mix of Slavic building tradition and northern defensive logic, likely influenced by both Scandinavian and Byzantine models.

What makes Ladoga's architecture especially significant is its continuity. Unlike other fortresses that rose abruptly in response to crisis, Ladoga's defenses evolved steadily, expanding with the town's political and economic growth. Excavations reveal multiple rebuilding phases, suggesting not just conflict, but also organized urban planning—walls rebuilt higher, towers widened, wooden palisades replaced with stone rings. By the late 12th century, the fortress took on a form that would echo in later Kremlin designs: concentric defenses, a fortified gate, and an interior administrative complex.

This transition is key in tracing the development of the Kremlin, the archetypal Russian fortress. Though the most famous Kremlin is in Moscow, nearly every major Rus' town had its own—Novgorod, Pskov, Tver—each with roots in early fortified settlements like Ladoga. The earliest Moscow Kremlin, built in the late 12th or early 13th century, was originally a wooden palisade enclosing a citadel on the high ground above the Moscow River. Though none of its original structures survive, archaeology has revealed remnants of moats, postholes, and charred beams, along with imported stone and tile fragments from later rebuildings.

These early Kremlins were multipurpose compounds, combining military, religious, and political functions. In Ladoga and early Moscow, a central church would stand near the prince's residence, surrounded by grain storage buildings, barracks, and administrative offices. The wall itself was not just a defensive feature—it was a symbol of legitimacy, declaring the presence of authority and protection in a chaotic, often violent frontier world.

Beyond their physical remains, these fortifications live on through their layered presence in settlement patterns. Many of today's Russian towns are still centered around these early fortresses, their modern streets tracing the curves of vanished ramparts, their cathedrals rising from the same mounds where wooden churches once stood. The earth remembers—through raised ground, buried timbers, and the quiet geometry of stones.



In Staraya Ladoga and the first Kremlins, we see architecture as narrative—not grand monuments, but structures that tell of a people learning to hold land, protect trade, and define power. These were the skeletal beginnings of statehood, where rivers became borders, and wood and stone became the first lines drawn around an identity.

### **Wooden posthole remains from Neolithic lake settlements in Russia**

Long before fortresses rose on hills and Kremlins traced the authority of princes, communities in prehistoric Russia built their lives on the edge of water—lakes, rivers, and bogs, where reeds swayed and fish stirred beneath quiet surfaces. In these liminal landscapes, some of the earliest architecture in the region took root not in grand buildings, but in timber posts driven deep into soft soil, forming the foundations of Neolithic lake settlements. Though no walls remain and no roofs survive, these posthole patterns, preserved in anaerobic conditions beneath lakeshores, tell a story of ingenuity, resilience, and how early humans shaped space in the face of nature’s uncertainty.

The most prominent examples of these structures come from northwestern Russia, particularly around Lake Onega, Lake Ladoga, and the peat-rich shores of the Upper Volga. There, Neolithic and early Eneolithic communities—dating from roughly 6000 to 3000 BCE—constructed pile dwellings, houses raised on wooden supports to protect against seasonal flooding, humidity, and pests. In many cases, the buildings stood directly over water or on marshy ground, forming clusters of structures connected by walkways or platforms, much like the lake villages of prehistoric Switzerland or the Baltic coast.

These dwellings were not elaborate, but they were functional. The remains consist primarily of vertical postholes, sometimes in ovoid or rectangular arrangements, sunk into clay or organic layers and surrounded by debris from hearths, pottery, flint tools, and animal bones. Archaeologists have identified rows of posts indicating the outlines of wall frames, likely built with wattle and daub or wooden planks. Some settlements show repeated use of the same locations, with new posts inserted beside old ones, suggesting that these homes were rebuilt or expanded over generations.

What’s remarkable is the level of preservation. In waterlogged conditions, the wood of the posts is often darkened, compressed, but intact, allowing for species identification and dating. Oak, birch, and pine were favored materials, cut with stone or early metal tools and shaped to fit tightly into foundation trenches. In some sites, horizontal planks or floor layers have also been recovered, bearing the impression of domestic life—burn marks, animal prints, even tool scratches.

These lakeside communities did not merely build houses—they constructed ecosystems of habitation, interlacing food storage pits, fish traps, hearths, and work areas into their living spaces. Some settlements feature fenced enclosures, perhaps for livestock or drying reeds. Others include ritual deposits, such as clusters of animal bones or decorated figurines, placed near post bases—suggesting that the act of building carried spiritual weight, a gesture not only of shelter but of sacred anchoring in place.

In broader terms, the architecture of these Neolithic lakeside settlements reflects a deep environmental awareness. Builders chose spots with natural drainage, used renewable

materials, and designed their homes to breathe with seasonal cycles. They were semi-permanent, adaptable, and repairable—a contrast to later stone fortifications or temples, but no less sophisticated in their understanding of space and need.

Though these sites are often hidden beneath modern vegetation or submerged in peat, remote sensing and careful excavation have brought their patterns into view. From plan views of concentric post rings to clusters of stake alignments, archaeologists can now reconstruct floor plans, entrances, and circulation paths within these ancient dwellings. Each posthole is a fossil of intention, a decision made thousands of years ago: where to sleep, where to eat, where to place the fire, where to anchor a life.

In the quiet depths of Russian lakes and bogs, these wooden traces whisper of a world where architecture was an extension of the body and the land, not a barrier from nature but a dialogue with it. They remind us that the earliest builders were not kings or warriors, but families and communities—shaping shelter from tree and mud, anchoring their lives to the rhythm of water and earth.

### **Viking longhouses: Reconstructed based on postholes and hearth placements**

In the wind-swept fields of Scandinavia and along the eastern routes where Norse traders and settlers reached into the lands of Rus', the architecture of the Viking world left few standing walls—but it did leave shadows in the soil. The longhouse, central to Viking domestic and communal life, has been largely reconstructed not through preserved structures, but through patterns of postholes, hearth remains, and scattered refuse—the quiet residues of centuries of occupation. From Sweden to Denmark, and even in Viking-age settlements in Russia such as Gnezdovo and Ladoga, these outlines offer a window into how early medieval northern societies structured their lives, labor, and beliefs.

Viking longhouses were more than dwellings—they were multi-purpose halls, serving as living quarters, storage spaces, craft workshops, and power centers. Constructed primarily of timber and turf, these buildings were highly vulnerable to decay, but the postholes that once anchored their frame remain detectable in the soil. Excavations typically reveal double rows of large, regularly spaced postholes running parallel along the long axis, indicating the support structure for a heavy roof. In some cases, smaller postholes mark the partitioning of space inside the house, dividing public areas from sleeping spaces, storage alcoves, or animal stalls.

What defines a longhouse is not just its length—often 20 to 30 meters, and occasionally over 50—but its internal logic. Central to every longhouse was the hearth, often a long rectangular firepit lined with stones or clay, located in the center of the floor. These hearths were more than heating elements—they were spiritual and social anchors, where food was prepared, stories told, and oaths made. Archaeological finds around these hearths include burnt bones, metal fragments, and charred wood, suggesting intense and prolonged use. In some sites, hearth layers reveal multiple rebuildings, with new ash deposits laid over the old, each one a page in a domestic history.

Reconstruction efforts based on these remains have yielded strikingly consistent forms: sloping roofs supported by internal posts, walls made from wattle and daub or vertical planks,

and exterior layers of sod or thatch to insulate against the cold. Entrances were often placed at the long sides, with smaller ancillary buildings nearby for storage, smithing, or livestock. Some longhouses, especially those found in elite settings like Birka (Sweden) or Trelleborg (Denmark), show evidence of higher craftsmanship, including carved beam ends, painted wall panels, and specialized rooms likely used for gatherings, feasts, or legal assemblies.

Longhouses in Viking Rus', such as those near Gnezdovo and Staraya Ladoga, follow similar architectural outlines but incorporate local materials and influences. Posthole patterns show buildings slightly narrower, with evidence of interior raised platforms, possibly adapted for winter insulation or combined Slavic-Scandinavian family use. The fusion of building techniques reflects the hybrid cultures that emerged along the Dnieper trade route, where Norse traders, Slavic villagers, and Finno-Ugric craftsmen cohabited and exchanged not only goods but ways of living.

The placement of longhouses in settlements also reveals much about social order. In larger communities, they were aligned in rows or circles, facing central courtyards, suggesting communal planning. In rural farms, the longhouse stood alone or near burial mounds and boundary markers, linking the architecture of the living with the memory of the dead. Tools, weapons, loom weights, and gaming pieces found in posthole contexts suggest vibrant domestic lives carried out in spaces that were fluid—adaptable to work, rest, ritual, and conflict.

Though the wood has vanished, these traces in the earth let archaeologists resurrect not only the shape of Viking homes, but the pattern of their days. From the rhythm of cooking fires to the geometry of sleeping benches, from the thresholds that marked the sacred boundaries of the home to the corner where the ancestor's memory might have been honored with a carved post or token, the longhouse remains one of the most enduring expressions of Viking identity.

It was not a castle, not a temple, but something more essential: a house for the living, a hall for the clan, a hearth for the soul.

### **Comfort and Control – Roman Villas and Bathhouses in Stone and Heat**

Amid the ruins of Roman provinces, from Britannia to North Africa and deep into the eastern Mediterranean, lie the patterned floors and empty chambers of once-thriving villas and bathhouses. Though roofs have collapsed and statues have been removed, what remains—mosaic floors, underfloor heating systems, marble columns, and water channels—speaks of a society that mastered both luxury and engineering. In these structures, we glimpse how Roman architecture extended beyond function into a form of social expression: to build a villa was to display not only wealth, but an understanding of order, leisure, and the manipulation of the environment.

Roman villas, especially those found in Italy, Gaul, and the Black Sea coast, were not mere farmhouses. They were hybrid spaces—working agricultural estates on the one hand, and elite retreats on the other. The layout typically included residential quarters with reception rooms, dining areas, private baths, and courtyards, alongside production zones for oil, wine, or grain. In the eastern provinces, some villas integrated local architectural traditions with

Roman design—stone columns supporting painted porticoes, and internal gardens shaded by colonnades.

The most striking features often lay beneath the feet. Mosaic floors, made from tiny tesserae of colored stone, glass, or tile, depicted everything from geometric patterns to mythological scenes. In the villa at Piazza Armerina in Sicily, for instance, the floor mosaics stretch across vast rooms, showing hunting scenes, chariot races, and dancing women. These mosaics were not only decorative—they marked function, status, and cosmopolitan taste, linking the household to both Roman ideals and local traditions. In villas found near the Crimean coast or in the Levant, Greek and local inscriptions sometimes appear alongside Roman images, merging identities through artistry.

Bathhouses, whether attached to villas or standing alone in cities and military outposts, reflected Roman mastery of thermal control. The hypocaust system, one of the most advanced ancient heating technologies, involved a raised floor supported by a grid of stone or brick pillars. Hot air from a furnace passed beneath the floor and through hollow wall flues, warming the *caldarium* (hot room), *tepidarium* (warm room), and even private chambers. These spaces were carefully engineered, with brick-lined arches and waterproof concrete, allowing for efficient heating and structural strength.

In places like Pompeii, Herculaneum, and Ostia, bathhouses were not just for bathing—they were social centers, places for conversation, exercise, and sometimes even business. Private villas adopted this model, turning bathing into a ritual of elite domestic life. In provincial villas in Gaul and Hispania, the presence of a personal bath suite—however modest—reflected the owner's assimilation into Roman culture. Heating was not only comfort, it was a statement: the house obeyed the rhythms of Roman leisure and architectural science.

Excavations of villas in modern-day Russia and Crimea, particularly around ancient Greek and Roman colonies such as Chersonesus and Phanagoria, show similar features—courtyards, imported mosaic fragments, and rudimentary heating systems. These outposts of Roman life far from the Tiber reveal a world where architecture was a tool of acculturation, offering order and refinement on the frontier.

Roman architecture fused utility with ideology. Mosaics told stories, heating soothed the body, and the very layout of space—open atriums, axial symmetry, water channels—reflected a worldview in which human design could mirror cosmic harmony. In villas and baths, the private became political. To build such a structure was to participate in empire—not just by law or military might, but through stone, tile, and the unseen warmth rising from beneath the floor.

### **Ghosts in the Earth – Reconstructing Anglo-Saxon Halls from Soil and Shadow**

In the green fields and low hills of early medieval England, where written records were rare and stone was seldom used, the great halls of the Anglo-Saxon world have long since vanished. Yet in the quiet geometry of soil discolorations and the subtle dips of ploughed ground, their presence lingers. These halls—centers of tribal life, lordly power, and communal identity—were built in timber and thatch, and what they left behind is not masonry but traces in the earth. Through careful excavation, pattern recognition, and

increasingly refined soil analysis, archaeologists have learned to reconstruct not just buildings, but the rhythms of a lost society.

The Anglo-Saxon hall was typically long and rectangular, with central hearths, timber walls, and a pitched roof supported by massive wooden posts. But unlike the stone castles that followed, these structures decayed quickly. Most of what remains is posthole patterns—dark stains in lighter soil where upright beams once stood—aligned in parallel rows, often framing a central aisle. At sites like Yeavering in Northumberland, Sutton Courtenay, and Lyminge in Kent, archaeologists have revealed entire building plans based only on such postholes, aided by differences in soil chemistry and compactness.

Halls were not just homes—they were political spaces. They served as seats of lordship, places where warriors feasted, judgments were given, gifts exchanged, and poetry recited. To reconstruct them from minimal traces requires not only physical excavation but also historical interpretation. Written sources like *Beowulf* and the Anglo-Saxon Chronicle describe such halls in vivid, sometimes mythologized terms—gleaming with treasure, ring-giving kings, and communal firelight. Archaeology must balance this literary image with the material sparseness of what the earth provides.

In many cases, reconstructions are based not just on posthole outlines, but on soil compaction patterns from long-decomposed walls or floor activity. Midden deposits—accumulations of ash, bone, or broken tools—can suggest where people cooked or gathered. Charcoal traces may indicate central hearths. Burn layers reveal episodes of destruction or ritual abandonment. These clues, combined with comparative architectural models from Viking-age Scandinavia and Carolingian Europe, help archaeologists flesh out the dimensions, roof height, and construction materials of Anglo-Saxon buildings.

Some halls were modest—perhaps the home of a village reeve or minor lord—while others, like those at Yeavering or Rendlesham, were monumental. At Yeavering, beneath a modern field, excavators uncovered the imprint of an enormous timber hall nearly 25 meters long, accompanied by smaller buildings, enclosures, and even a possible wooden grandstand for public gatherings. Soil analysis showed evidence of multiple construction phases, suggesting not only long-term use but intentional rebuilding, reinforcing the symbolic power of the site across generations.

Anglo-Saxon builders adapted to the local environment, using oak, elm, and ash, and creating joints held by wooden pegs rather than metal. Their architecture was not designed for permanence, but for flexibility, familiarity, and renewal. This ephemerality makes their recovery all the more significant. A single posthole can represent a pillar once supporting the roof beneath which laws were spoken or epics sung.

In some cases, no artifacts are found—only negative space where walls once stood, visible only through discoloration or changes in vegetation. Yet even these silent remnants are rich in meaning. They speak of a time when community identity was built in wood, not stone, and when architecture functioned as a living framework—renewed, dismantled, and rebuilt according to the needs of the clan.

Today, with aerial photography, ground-penetrating radar, and digital modeling, archaeologists are able to take these faint soil marks and reconstruct the vanished halls in striking detail. Virtual reconstructions and experimental archaeology projects, like those at

West Stow, bring these timber worlds back into view, revealing how earth and memory combine to restore a forgotten architecture.

What remains of the Anglo-Saxon hall is not the hall itself, but the pattern of its presence—a ghostly outline beneath the grass, where power once stood and fire once burned, now read like runes carved into soil.

## **Hidden Grids – Islamic Urban Layouts Revealed in Foundation and Flow**

In the sun-drenched ruins of cities from North Africa to Central Asia, where the streets once hummed with traders, scholars, and craftsmen, the legacy of Islamic urban design remains quietly embedded in stone foundations and buried water channels. Though the superstructures of mudbrick and plaster have long eroded under centuries of wind and war, archaeologists have unearthed the skeletal frameworks of entire neighborhoods—revealed through foundation walls, street alignments, courtyard traces, and irrigation networks that once sustained life in the world’s great Islamic cities.

The Islamic city, or *medina*, was rarely built according to a single central plan. Instead, its layout emerged organically, adapting to terrain, water sources, social structure, and religious needs. Yet across regions, from Cairo to Samarkand, Córdoba to Nishapur, certain patterns recur. Chief among them is the courtyard house—a residential model designed not only for climate control and privacy, but for spiritual and social balance.

Excavations in cities like Fustat (Old Cairo), Rayy in Iran, and Merv in Turkmenistan reveal house compounds oriented around a central courtyard, often paved, sometimes with a central basin or tree. The rooms of the home opened inward, not outward, reflecting the Islamic emphasis on interior domestic sanctity. Foundation walls, traced in mudbrick outlines or stone footings, allow archaeologists to reconstruct not only the spatial logic but the cultural values of these homes—emphasizing separation between public and private life, between men’s and women’s quarters, between reception and retreat.

In wealthier homes, courtyards connected to iwan halls—vaulted chambers opening to the yard—and narrow staircases led to upper levels, now vanished, where women’s quarters or guest accommodations once stood. Drainage channels and cisterns lined the base of walls, and the foundation footprint reveals the relationship between kitchen, latrine, prayer space, and storage areas. These homes were not just functional—they were microcosms of Islamic order, shaped around rhythm, modesty, and the management of space.

Equally important are the traces of irrigation systems, often preserved beneath the ground even when buildings are gone. The qanats and sāqiya—underground channels and mechanical water-lifting devices—allowed water to be diverted from distant sources into cities, feeding public fountains, gardens, and household basins. At sites like Balkh, al-Andalusian Madinat al-Zahra, or Zubaid in Yemen, networks of clay pipes and stone conduits can still be traced, guiding archaeologists through the arteries of vanished cities. These systems were often connected to communal baths, mosques, and garden complexes, reflecting a worldview in which cleanliness, greenery, and water were both practical needs and spiritual imperatives.

Urban foundations also reflect the role of religious and commercial architecture in shaping city life. Mosques, with their distinctive qibla orientation, often anchor the layout of adjacent neighborhoods. Archaeological studies of city centers in Jerusalem, Aleppo, and Bukhara show how mosques, madrasas, markets, and caravanserais were clustered, forming both sacred and economic cores. Even when only foundation walls remain, their alignment reveals the planning logic—narrow alleyways shaded from the sun, residential cul-de-sacs, and wide main roads connecting gates to the central Friday mosque.

What emerges from these foundations is not a rigid grid but a network of relationships—between people and place, between public ritual and private rest, between water and stone. Islamic cities were not built for spectacle, but for function, flow, and spiritual coherence. Their layouts reflected a theology of space, where modest exteriors concealed rich inner life, and where the rhythm of daily movement—prayer, market, rest—was inscribed into the physical world.

Modern archaeological methods, including drone mapping and thermal imaging, have allowed researchers to uncover entire buried districts of once-flourishing cities. In some cases, these maps echo medieval urban guides or travelers' accounts, confirming the layered intelligence of Islamic urban design—a blend of inherited Roman plans, Persian courtyard traditions, and Arab nomadic sensibilities, all woven into a flexible, enduring form.

Today, these cities remain half-buried, their stories told not by spires but by foundation stones, water paths, and vanished thresholds. And yet in these invisible grids, one can still trace the human scale of a civilization that valued balance over monumentality, and life's daily pulse over grand display.

## **Houses for the Dead – Etruscan Tomb Chambers and the Architecture of the Afterlife**

Beneath the hills of central Italy, hidden in necropolises carved into volcanic rock, the Etruscans built cities not only for the living but for the dead. From the 9th to the 3rd century BCE, these mysterious pre-Roman people constructed tomb chambers that did more than hold remains—they replicated the layout and character of domestic architecture, forming an intimate bridge between daily life and the eternal. In the absence of surviving Etruscan homes above ground, these underground spaces offer one of the clearest windows into how they imagined space, status, and the soul's journey beyond death.

Carved into tufa, a soft volcanic stone abundant in the region, these tombs often begin with sloping corridors leading into chambers that resemble rooms in a house. Walls are etched to imitate timber beams, doors, roof tiles, or furniture. Some tombs have pillars carved in situ, supporting imaginary roofs. Others are painted with friezes of red and black bands, imitating the decorated borders of Etruscan homes. These were not symbolic gestures—they were literal reconstructions, meant to shelter and comfort the dead as if they still dwelled among the living.

The Banditaccia necropolis at Cerveteri offers particularly striking examples. There, tumuli—earthen mounds over circular tomb chambers—hide multiple-room complexes beneath. Inside, the carved stone beds, benches, and imitation household fixtures suggest that the tomb was not merely a container for a body, but a continuation of the house, frozen in rock. Even

personal possessions—mirrors, jewelry, weapons, and pottery—were arranged as they would be in life, reinforcing the idea that the tomb was a fully furnished afterlife dwelling.

In Tarquinia, another major Etruscan center, many tombs were elaborately painted with scenes of banquets, dancing, music, and mythological journeys. While these painted tombs complement the architectural features, they also enhance the illusion: guests gather, feasts unfold, and the deceased becomes a participant in a never-ending celebration. This idea of tomb-as-home, filled with joy and community, reflects a culture where death was not rupture, but transformation.

These tombs followed recognizable spatial logic—an entryway leading to a main hall, flanked by side rooms, and sometimes with niches or alcoves for urns or sarcophagi. Ceiling beams, roof trusses, and even ridgepole decorations were carved directly into the rock. In doing so, the Etruscans replicated not only form, but structural principles, showing deep familiarity with wooden architecture even when working in stone. Where wood might decay, the imitation of wood in stone ensured permanence, anchoring the soul as securely as the house had anchored the family.

What is especially significant about Etruscan tomb architecture is its social meaning. The size and complexity of the tomb reflected the status of the family. Names were inscribed over entrances or carved onto urns, and family burial plots became lasting monuments of lineage and memory. In larger necropolises, tombs were arranged in street-like rows, forming a city of the dead that mirrored the city above, suggesting a belief in a mirrored world, where the dead continued to inhabit a social and spatial order much like that of the living.

Though Rome would later absorb and largely overwrite Etruscan culture, the Romans inherited this concept of the tomb as a constructed, lived space. Yet the Etruscans were more intimate in their approach—not grand monuments of triumph, but personal chambers of memory. Their architecture of the dead reveals a worldview in which the boundary between worlds was porous, and where stone could hold not only the body but the echoes of conversation, rest, and routine.

Today, descending into these chambers is like entering a dream of a house half-remembered—familiar in structure, yet filled with silence. The tombs whisper of people who believed that architecture could hold the spirit, that walls could guard not just the remains, but the story of a life, shaped in stone to weather both time and forgetting.